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# THE FOUNDERS

Innovation Fund was created in 2015 at the initiative of François Cornelis and his 12 colleagues of a non-profit association, Innovation Circle, dedicated to the support and assistance to young entrepreneurs in the Chemicals and the Life Sciences.

The individuals believed that their support needed to be extended by the availability of a dedicated fund.

The Fund finances promising ventures while offering them the best professional and technical support.

The founders have been joined in their ambition by corporations, universities and national and regional investment companies.

Their aim is to promote science, create long term value for shareholders and provide new quality employment in Belgium and neighbouring regions.



Jean Stephenne Honorary Member



# THE INVESTORS

INVESTORS, MEMBERS OF THE BOARD AND OF THE INVESTMENT COMMITTEE



























INVESTORS, MEMBERS OF THE BOARD





















OTHER INVESTORS





**Innovation Fund Feeder** 







Innovation Fund, in its fourth year of existence, was successful in 2018 and is very happy to report a first year of profit, of 272 k€ attributable to the sale of TrendMiner.

Capital gain on the sale of our interest in TrendMiner should, according to certain milestones, exceed 1 Mo€; a first instalment of 700k€ was recorded in 2018.

This is nice but unexpected; Innovation Fund believed, indeed, that there was more potential in the future of TrendMiner and was, also, not expecting to book a profit before the maturity of its portfolio.

The operating costs of the year amounted to  $415 \text{K} \in$ , same as the year before; operating costs amount to 1.5% of capital, under budget and well below the 2% internal regulation.

Innovation Fund invested in 7 new ventures: 3 in the process technology (a Belgian specialty), 2 in the circular economy, one in medical device and one in bio-technology. These investments and the disinvestment of TrendMiner brought our portfolio to 20 participations.

Cash invested during the year, net of the divestment of 1.1 Mo€ of TrendMiner, amounted to 3.4 Mo€, bringing the total so far to 9.9 Mo€; investment commitments are estimated at 15 Mo€, around 60% of our investable capital.

Five of our investments have, in their pricing or refinancing, enjoyed positive revaluations, while two had negative revaluations; it is an indication but no proof of a change in the long term value of those participations.

The board called the last tranche of capital in December, raising the cash reserve of the company to 17.5 Mo€.

In 2018, the Fund further amended its philosophy. Firstly, enjoying the competitive advantage of being evergreen, Innovation Fund has accepted in some circumstances to invest without predefined exits.

While it is still not our intention to keep participations for a long while, we do not exclude any more to support entrepreneurs aiming at long term international growth. Innovation Fund believes that companies showing world potential should, in fact, be encouraged to pursue their activities rather than be invited to sell themselves.

Secondly, Innovation Fund extended the range of its activities to medical devices and made its first investments in that area, expecting more to come.

Medical devices are the crossing of medicine and material science and benefit from the exceptional progresses made in both. We believe that our expertise and the numerous potential investments in that domain justify our interest.

Thirdly, Innovation Fund expanded its presence in neighbouring countries. After a first investment in Lyon (Mathym), Innovation Fund invested in a spinoff of Ecole Polytechnique de Lausanne (Daphne Technology) and wants to grow in those prime locations of science and engineering.

The Fund is, also, looking at other foreign scientific and technical hot spots which could increase its investment opportunities, its prestige and the cross-breeding of its start-ups.

Finally, Innovation Fund is accepting very small interests in larger corporations. After the original investment in Lisam (Software), Innovation Fund took interests of less than 2% in Univercells (Health) and in Agriprotein (Circular Economy). Those investments are justified by the world potential of the companies, their need of quality investors and their ambitious employment prospects for Belgium.

Innovation Fund expects that those investments will reinforce its professional expertise, its financial stability and its international recognition.

2019 has started on promising prospects. Our investment pipe-line is well supplied and we anticipate continuing our current investment tempo of around 7 investments per year, targeting a portfolio of around 30 lines in the early twenties.

Taking advantage of our evergreen status, we will also increase our interest in our preferred start-ups and gradually raise the average investment per line above 1 Mo€.

On proposal of the Board, we have opened, in the first quarter of 2019, a first liquidity window between existing shareholders, at 55K£ per share. It resulted in the sale of one share detained by an individual shareholder to another individual shareholder, an appreciated proof of the confidence of our shareholders.

We are envisaging a new stock offering at the end of the year; the objective is to welcome new actors from the industry to increase our expertise, and to give to the willing shareholders an opportunity to raise their holding.

New entrants will join under the new shareholders agreement of 90% majority ruling, 20 shares for a board seat and 40 shares for an Investment Committee seat.

We do not expect any exit and, hence, any profit in 2019; neither do we expect a major change in the value of the share. Life in a young investment fund remain, nevertheless, relatively unpredictable.

Investments in start-ups prove everyday intellectually and financially challenging.

There is a lot of money around but there isn't a lot of money taking true entrepreneurial risks and there isn't a lot of assistance available for fledging entrepreneurs. Our managers are doing just that. We thank them for a professional and dedicated job and for the time they spend in coaching our start-ups.

We created Innovation Fund to do good, and, by and large, thanks to them and thanks to the money and the technical expertise of our shareholders, so far we did it.

We look forward to 2019. The blossoming of our best investments and the engagement of new ventures will be our most pleasant endeavour of the year.

François Cornelis Chairman Con

# ANNUAL ACCOUNTS

**ASSETS in EUR** 

formation expenses	20		41.223		70.981
fixed assets	21/28		9.088.003		6.436.402
financial assets	28		9.088.003		6.436.402
participation InOpSys		750.020		500.011	
loan InOpSys		249.990		249.990	
participation Lisam Systems		250.000		250.000	

2018

2017

1114110141 455045	= "		010001000		011001102
participation InOpSys		750.020		500.011	
loan InOpSys		249.990		249.990	
participation Lisam Systems		250.000		250.000	
participation Trendminer		0		1.087.368	
participation Pharmafluidics via InnoTheo		674.985		674.985	
participation X4C		30.000		30.000	
reduction of value on participation X4C		-30.000		-30.000	
participation Fyteko		1.100.062		500.000	
participation Fyteko (uncalled)		-450.047			
participation Mathym		504.246		500.139	
participation Aerosint		372.000		147.000	
participation AllerInvest		600.000		600.000	
participation Proceedix		600.000		600.000	
participation Iristick		350.020		350.020	
convertible loan Iristick		23.800			
participation BlueFootMembrane		499.519		499.519	
participation Rein4ced		777.379		327.376	
participation TheraVet		299.989		149.994	
participation Zeopore		500.000			
participation Univercells		499.983			
participation Aloxy		250.000			
participation Daphne		478.547			
participation DoseVue		250.000			
participation PurVer		507.510			

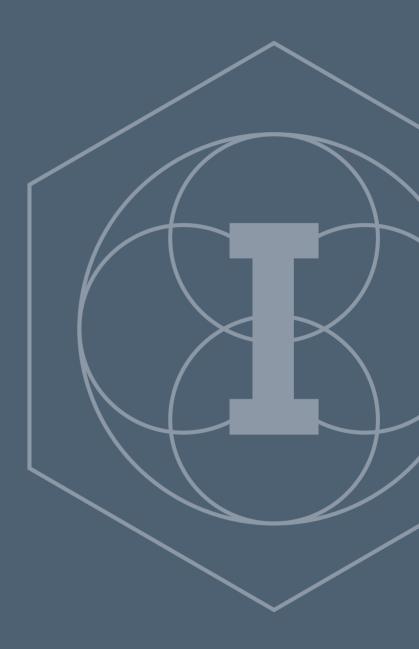
ASSETS in EUR			2018		2017
long term receivable amounts	29		799.986		
convertible loan AgriProtein		799.986			
amounts receivable within one year	40/41		1.437.527		1.862.521
unpaid capital		1.437.500		1.862.500	
taxes to be recovered		27		21	
cash at bank and in hand	54/58		16.137.649		11.942.623
accrued Income	490/1		13.768		3.726
interests on loan InOpsys		13.725			
interests on loan Iristick		43			
total assets			27.524.156		20.316.253

— LIABILITIES in EUR			2018		2017
capital & reserves	10/15		27.600.000		20.310.126
issued capital	100	27.600.000		27.600.000	
uncalled capital	101	0		-6.900.000	
issue premium	11		760.000		760.000
loss carried forward	141		-877.722		-1.149.874
amounts payable	17/49		41.878		6.127
suppliers	44	41.878		6.127	
total liabilities			27.524.156		20.316.253

TRICOR	ro emamaa,	ENT in EUR
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operating income & charges	60/61				
operating charges	61		-415.470		-415.603
office rental		-3.025			
EEBIC management fees		-150.000		-400.000	
management fees		-237.502		-8.282	
acounting fees		-5.528		-3.691	
auditor's fees		-5.445		-3.630	
lawyer's fees		-1.512			
office supplies		-139			
marketing & representation expenses		-11.727			
legal formalities		-592			
depreciation of formation expenses	630		-23.758		-23.758
other operating charges	640/8		-894		-868
social contribution of the company		-894		-868	
operating loss	64/70		-440.122		-440.229
financial income	75		10.163		3.842
financial charges	65		-666		-30.127
bank charges		-666		-127	
reduction of value on participation X4C				-30.000	
extraordinary income			702.778		
capital gain on TrendMiner		702.778			
profit for the period to be appropriated	68/70		272.152		-466.515

profit to be appropriated	69/70		272.152		-466.515
profit for the period available for appropriation	68/70	272.152		-466.515	
loss brought forward	690		-1.149.874	-683.359	-683.359
loss to be carried forward			-877.722		-1.149.874



# STATUTORY AUDITOR'S REPORT TO THE GENERAL ASSEMBLY OF SHAREHOLDERS ON THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31<sup>ST</sup>, 2018

Ladies and Gentlemen,

In the context of the statutory audit of the annual accounts of the public limited liability company INNOVATION FUND (the "Company"), we hereby present our statutory auditor's report. It includes our report on the audit of the annual accounts as well as our report on the other legal and regulatory requirements to be communicated by the auditor. These reports form part of an integrated whole and are indivisible.

We have been appointed as statutory auditor by the general meeting of June 12, 2018, following the proposal formulated by the board of directors. Our statutory auditor's mandate expires on the date of the general meeting deliberating on the annual accounts closed on 31 December 2020. We have performed the statutory audit of the annual accounts of the company for 4 consecutive years.

#### REPORT ON THE AUDIT OF THE ANNUAL ACCOUNTS

#### **UNOUALIFIED OPINION**

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In our opinion, the annual accounts give a true and fair view of the Company's net equity and financial position as at 31 December 2018, as well as of its results for the year then ended, in accordance with the financial reporting framework applicable in Belgium.

#### BASIS FOR UNQUALIFIED OPINION

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the 'Statutory auditor's responsibilities for the audit of the annual accounts' section in this report. We have complied with all the ethical requirements that are relevant to the audit of annual accounts in Belgium, including those concerning independence.

We have obtained from the board of directors and company officials the explanations and information necessary for performing our audit.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### RESPONSIBILITIES OF THE BOARD OF DIRECTORS FOR THE ANNUAL ACCOUNTS

The board of directors is responsible for the preparation of annual accounts that give a true and fair view in accordance with the financial reporting framework applicable in Belgium, and for such internal control as the board of directors determines is necessary to enable the preparation of annual accounts that are free from material misstatement, whether due to fraud or error.

In preparing the annual accounts, the board of directors is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the board of directors either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

#### STATUTORY AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE ANNUAL ACCOUNTS

Our objectives are to obtain reasonable assurance about whether the annual accounts as a whole are free from material misstatement, whether due to fraud or error, and to issue a statutory auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these annual accounts.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the annual accounts, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control;
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the board of directors;
- Conclude on the appropriateness of the board of directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our statutory auditor's report to the related disclosures in the annual accounts or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our statutory auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern;
- Evaluate the overall presentation, structure and content of the annual accounts and whether the
  annual accounts represent the underlying transactions and events in a manner that achieves fair
  presentation.

We communicate with the board of directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identified during our audit.

# REPORT ON THE OTHER LEGAL AND REGULATORY REQUIREMENTS TO BE COMMUNICATED BY THE AUDITOR

#### RESPONSIBILITIES OF THE BOARD OF DIRECTORS

The board of directors is responsible for the preparation and the content of the management report, for the documents to be deposited in accordance with the legal and regulatory requirements, as well as for the compliance with the legal and regulatory requirements regarding bookkeeping, with the Company Code and with the Company's by-laws.

#### RESPONSIBILITIES OF THE STATUTORY AUDITOR

In the context of our mandate and in accordance with the Belgian standard (Revised in 2018) which is complementary to the International Standards on Auditing (ISAs) as applicable in Belgium, it is our responsibility to verify, in all material aspects, the management report, certain documents to be deposited in accordance with the legal and regulatory requirements, and compliance with certain provisions of the Company Code and of the Company's by-laws, as well as to report on these elements.

STATEMENT CONCERNING THE DOCUMENT TO BE DEPOSITED IN ACCORDANCE WITH ARTICLE 100, § 1, 6°/1 OF THE COMPANY CODE

The list of the enterprises in which the enterprise holds a participating interest, to be deposited at the National Bank of Belgium in accordance with article 100 § 1,6°/1 of the Company Code, include, both in terms of form and content, the information required by the said Code and doesn't present any material inconsistencies with the information that we became aware of during the performance of our mandate.

#### STATEMENT RELATED TO INDEPENDENCE

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Our audit firm did not provide services which are incompatible with the statutory audit of annual accounts, and we remained independent of the Company during the terms of our mandate.

No additional services which are compatible with the statutory audit of annual accounts as referred to in article 134 of the Company Code and which implicated fees has been carried out.

#### **OTHER STATEMENTS**

- Without prejudice to certain formal aspects of minor importance, the accounting records are maintained in accordance with the legal and regulatory requirements applicable in Belgium.

- The appropriation of results proposed to the general meeting complies with the legal provisions and the Company's by-laws.
- There are no transactions undertaken or decisions taken in breach of the by-laws or of the Company Code that we have to report to you.

Brussels, March 18th, 2019

BST Réviseurs d'Entreprises S.C.P.R.L., represented by Pascale TYTGAT

# THE GOVERNANCE



From left to right: Rodolphe COLLINET (Carmeuse), Thierry PIRET (Solvay), Olivier CHAPELLE (Recticel), Luc REGINSTER (Chemium), Jos BEHIELS (ING), Alain BOSTOEN (Christeyns), An VAN DEN BROECKE (UGent), François CORNELIS (Chairman), Nathalie BRUNELLE (Total), Fabian MARCQ (Noshaq), Matthieu DE POSCH (SFPI/FPIM), Philip BUSKENS (BASF), Karl ADAMS (Sofipôle), Joost WILLE (Sioen), Jean-Marie SOLVAY (Solvay family), Axel ROUSSIS (Ravago)

THE BOARD

Baron François CORNELIS, Chairman

Mr. Christian COLLETTE, Vice President R&D, ARKEMA

Baron Koenraad DEBACKERE, General Manager, KULEUVEN

Mr. Axel ROUSSIS, Commercial Director, RAVAGO

Mr. Luc REGINSTER, President, CHEMIUM

Mr. Jean-Marie SOLVAY, Board member, SOLVAY

BASF ANTWERPEN represented by Mr. Philip BUSKENS

CARMEUSE represented by Baron Rodolphe COLLINET

CHRISTEYNS represented by Mr. Alain BOSTOEN

IMBC SPINNOVA represented by Mr. Serge DEMOULIN

ING BELGIQUE represented by Mr. Jos BEHIELS

**HUTCHINSON** represented by Mr. Jacques MAIGNE

NOSHAQ (formerly MEUSINVEST) represented by Mr. Fabian MARCQ

PARTICIPATIEMAATSCHAPPIJ VLAANDEREN represented by Mr. Roald BORRE

RECTICEL represented by Mr. Olivier CHAPELLE

SAMBRINVEST SPIN-OFF/SPIN-OUT represented by Mrs. Anne PRIGNON

S.F.P.I./F.P.I.M. represented by Mr. Matthieu de POSCH

SIOEN INDUSTRIES represented by Mr. Joost WILLE

SOFIPÔLE (S.R.I.W.) represented by Mr. Karl ADAMS

SOLVAY represented by Mr. Thierry PIRET

SOUDAL Holding represented by Mr. Jurgen VANDERVELDE

TOTAL PETROCHEMICALS & REFINING represented by Mrs. Nathalie BRUNELLE

UNIVERSITEIT GENT represented by Mrs. An VAN DEN BROECKE



From left to right: Christian JOURQUIN (Innovation Circle), Luc REGINSTER (Chemium), Thierry PIRET (Solvay), Helena POZIOS (Sambrinvest), François CORNELIS (Chairman), Benoît FELLIN (Noshaq), Matthieu DE POSCH (SFPI/FPIM), Yves MEURICE (Sofipôle), Olivier GREINER (Total), Jef WITTOUCK (Christeyns), Carl VAN CAMP (Innovation Circle)

THE INVESTMENT COMMITTEE

#### Baron François CORNELIS, Chairman

Mr. Michiel ALLAERTS, Financials & Operations, Ravago

Mr. Serge DEMOULIN, Senior financial analyst, IMBC

Mr. Matthieu de POSCH, Investment Manager, S.F.P.I./F.P.I.M.

Mr. Benoit FELLIN, Investment Manager, Noshaq (formerly Meusinvest)

Mr. Olivier GREINER, Vice-President Research & Development, Total RC

Mr. Christian JOURQUIN, Innovation Circle

Mr. Johan KEPPENS, Senior Investment Manager, Participatie Maatschappij Vlaanderen

Mr. Yves MEURICE, Investment Manager, S.R.I.W.

Mr. Thierry PIRET, Global Investment Strategy Manager of Solvay Ventures, Solvay

Mrs. Helena POZIOS, Investment Manager, Sambrinvest

Mr. Luc REGINSTER, President, Chemium

Mrs. Aude THIBAUT DE MAISIERES, Board Member, Solvac

Mr. Carl VAN CAMP, Innovation Circle

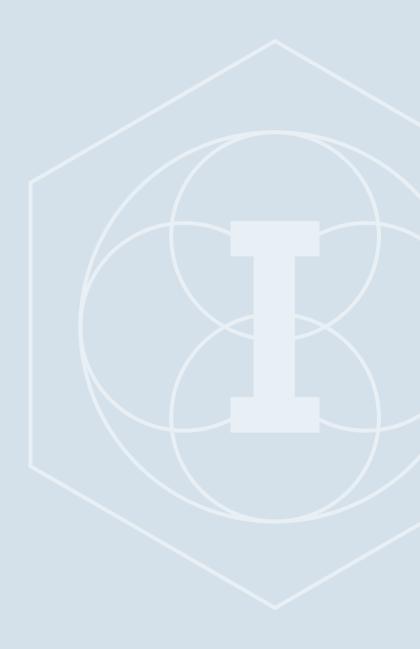
Mr. Paul VAN DUN, Head of Leuven Research&Development (LRD), KULeuven

Mr. Jef WITTOUCK, Managing Director, Christeyns



From left to right: Pol-Henry BONTE, François CORNELIS, Edith COUNE, André OSTACHKOV

THE EXECUTIVE COMMITTEE



# INVESTIMENTS MADE AS PER DECEMBER 31<sup>ST</sup>, 2018

#### **SOME STATISTICS**

**532 FTE'S** 

Employment in the 20 start ups on 31/12/2018

13.029 K€

Sales 2018 of the 20 start ups

- IF board seats out of 18 occupied by shareholders' delegates
- co-investments with shareholders out of 20

# InOpSys



#### COMPANY DESCRIPTION

Sector: Circular economy

Activity: Flexible, mobile and modular units for on-site

wastewater treatment

Founders: AvoRe (Steven De Laet) and Prof. Raf De Wil Registered Office: 12A Zandvoortstraat, 2800 Mechelen

**Board Member representing IF in InOpSys:** 

Hilde Luystermans (Total)



InOpSys NV develops and provides an innovative on-site solution for non-recyclable side and waste streams. Customers in pharmaceuticals, chemicals, fine chemicals,... are supported with an OPEX based, cost effective and sustainable alternative for transport and incineration. The recuperation of purified water and valuable components is realized whenever feasible. In this way InOpSys facilitates the implementation of circular economy in pharma and chemical production and

makes sustainability affordable.

Founded in December 2015, the company originated out of an idea within Catalisti and is a spin-off from KU Leuven University.

Steven De Laet, CEO

"We developed a strong team and installed our concept at the site of a major pharmaceutical producer with great success. InOpSys will prove that the implementation of a circular economy is possible in the wastewater treatment of industrial production sites."

key figures 2018	
FTE's 31/12/2018	7 (5 in 2017)
sales 31/12/2018	456 k€ (163 k€ in 2017)

#### **CAPITAL STRUCTURE ON 31/12/2018**

shareholder	%
founders	29,2
Gemma Frisius	20,6
VMH	20,6
Innovation Fund	20,6
total	100,00

In 2018, VMH (Vlaamse Milieu Holding) joined the existing investors to increase the capital by 3 Mo€, allowing InOpSys to scale up and further expand its activities within Europe.

#### **KEY EVENTS AND ACTIONS IN 2018**

In June, the second contract with Janssen Pharmaceutica was signed for a new mobile unit to treat a process stream of the Geel site.

New projects were initiated in Switzerland and Germany.

New IP is developed and will provide additional opportunities.

InOpsys is certified ISO9001 and ISO14001.

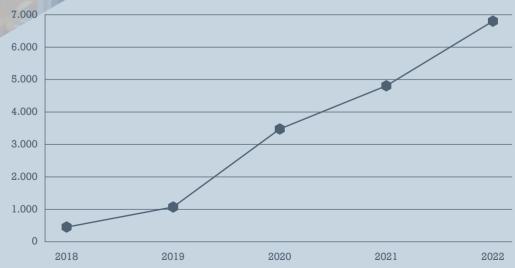
InOpsys won the Belgian Business Awards for the Environment with Janssen Pharmaceutica.

#### **EXPECTATIONS 2019**

The ambition for 2019 is three units in operation by year end and 5 new contracts for implementation in 2020.

EBITDA should be positive and revenues in excess of € 1 million.

#### SALES FORECAST in k EUR



### Lisam



#### COMPANY DESCRIPTION

Sector: Processes, Information technology

**Activity:** Management services for legal documents & reports on the environment, health & safety for the

chemistry and energy sectors

Founders: Michel Hemberg & Thierry Levintoff Registered Office: 42A Boulevard de la Sennette,

7190 Ecausinnes

**Board Member representing IF in Lisam:** 

Pol-Henry Bonte

Founded in 1999, Lisam Systems is a global provider of Environment, Health and Safety (EH&S) compliance management software solutions and services, operating from offices worldwide.

By combining an easy-to-use, flexible technology built on the Microsoft .NET platform, with the latest regulatory content, Lisam brings innovative, affordable and timely solutions to solve EH&S challenges faced by manufacturers, distributors and users of chemical products.

Working with industry associations and partners, Lisam has developed proprietary, vertical EH&S solutions for the chemical, specialty chemical, cosmetics, aromas and flavourings, detergents, paints, coverings, coatings, plastics and energy industries. Today, more than 1200 clients in these industries rely on Lisam's flagship software, ExESS® to manage their compliant safety data sheets (SDS) and labels, designed for all major commercial markets and available in 50 languages.

"ExESS software is a global leader in the SDS authoring niche market. The challenge is to expand the ExESS use in Asia and to increase the penetration of our Web SaaS offering."



key figures 2018	
FTE's 31/12/2018	311 (201 in 2017)
software license annual recurrent revenue	8.55 Mo€ (7.31 Mo€ in 2017)

#### **CAPITAL STRUCTURE ON 31/12/2018**

shareholder	%
founders	99,3
Innovation Fund	0,7
total	100,00

In January 2019, an additional 2 Mo € was injected in Lisam Systems, by IMBC, Innovation Fund and a private investor. Innovation Fund participation increased to 1.5%.

#### **KEY EVENTS AND ACTIONS IN 2018**

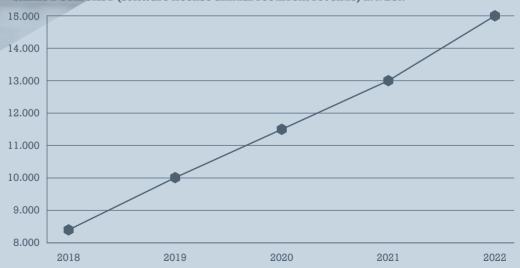
In 2018, Lisam's organic growth of 17% was obtained by selling new licenses and add-on on its flagship software ExESS. New modules built on the strategic platform Safetynet (EH&S Web-SaaS solutions) started contributing to the growth.

With the opening of the branches in Korea and in Australia, Lisam has almost finalised the implementation of its global distribution network.

#### **EXPECTATIONS 2019**

The 2019 objective is to reach 10 Mo € in software license recurring revenue and to increase the relative share of the new products. Lisam is working on an acquisition which could speed up the business development of new Web-SaaS solutions.

#### SALES FORECAST (software license annual recurrent revenue) in k EUR



## Pharma Fluidics

#### PharmaFluidics

#### COMPANY DESCRIPTION

Sector: Processes - Analytical Chemistry: molecular and

biopharmaceutical separation and analysis

Activity: New generation of micro-Chip based analytical

HPLC (liquid chromatography columns)

Founders: Paul Jacobs, Wim De Malssche, Gert Desmet

& Joeri Denayer

Registered Office: Technologiepark, 3 Zwijnaarde,

9052 Zwijnaarde

**Board Member representing IF in PharmaFluidics:** 

Marie Bouillez

Created in 2010, PharmaFluidics is a spin-off of the Vrije Universiteit Brussels, located in Flanders' "Life Sciences valley", near Ghent, Belgium. The key expertise of PharmaFluidics is the design, lithographic production and surface treatment of silicon wafers for use as separation devices in chromatography. PharmaFluidics has developed a range of game changing analytical HPLC products.

With their unprecedented resolution performance, PharmaFluidics'  $\mu$ PAC  $^{TM}$  micro-Chip based chromatography columns detect more molecules, with higher sensitivity, in tiny, complex biological samples. The  $\mu$ PAC  $^{TM}$  micro-Chip based chromatography columns are commercially available for proteomic and metabolomic profiling.



"2018 was a pivotal year for PharmaFluidics with the successful commercial roll-out of its first generation of  $\mu$ PAC<sup>TM</sup> micro-Chip chromatography columns. 2019 will see the scaling up of our commercial, supply chain and production operations. We also expect to reach important milestones with our development partners to materialise the technology for future product generations."

key figures 2018	
FTE's 31/12/2018	16 (8 on 31/12/2017)
sales 31/12/2018	300 k€ (287 k€ in 2017)

#### **CAPITAL STRUCTURE ON 31/12/2018**

shareholder	%
founders & management	3,9
Qbic 1	18,55
PMV	18,55
Heran	17,5
RMM	17,5
SFPI-FPIM	10,2
Innovation Fund (via InnoTheo)	6,3
Theodorus (via InnoTheo)	6,3
Volksvermogen	1,2
total	100,00

#### **KEY EVENTS AND ACTIONS IN 2018**

With its  $\mu PAC^{TM}$  product range, PharmaFluidics established itself as a leading commercial supplier of nano-LC columns for applications in "deep proteomics" and as a leading technology for precision/clinical proteomics. The product range was extended with a  $\mu PAC^{TM}$  compatible EASY-Spray  $^{TM}$  electrospray device, through an OEM agreement with ThermoFisher.

The company continued to work towards better references in the market, through opinion leaders, reference users and product tests by leading instrument companies.

The company hired dedicated commercial, customer support and production staff, and selected, set up and trained an international network of distributors.

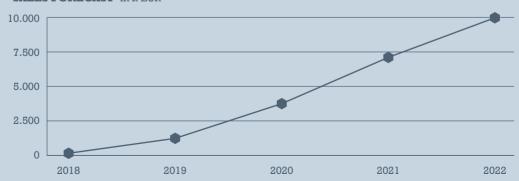
The company developed its premises and conceived, installed and commissioned a dedicated assembly line.

#### **EXPECTATIONS 2019**

PharmaFluidics will further commercialise its first generation of µPAC™ micro-Chip chromatography columns in selected high value niche markets – including ao deep proteomics, precision proteomics, single cell proteomics and the characterisation of bio-pharmaceuticals - through direct sales, indirect channels and alliances.

The product range will be extended with ao trapping columns and new stationary phases. PharmaFluidics will scale up supply chain and production capacity, and closely collaborate with foundries to further miniaturise its technology for next generation products.

#### SALES FORECAST in k EUR



# X4C



#### COMPANY DESCRIPTION

Sector: Materials Technology

Activity: Deposition of a post-functionalisable monolayer

of calix[4]arene

Founders: Alice Mattiuzzi

Registered Office: Rue Chêne Bonnet, 128

6110 Montigny-le-Tilleul

**Board Member representing IF in X4C:** 

Pol-Henry Bonte

X4C is a spin-off company from Brussels University. X4C develops an innovative surface coating solution for high-end applications. X4C's coating allows the formation, on any surface, of a well-organised, well-controlled, compact and robust monolayer, which can be post-functionalised in a well-organised way. Post-functionalisation opens the door to new properties: anti-thrombotic, anti-fouling, detection system,...

After two exploratory years, X4C decided to focus on the two markets that proved to be the most promising: medical devices (catheter, neurovascular stent, ophthalmic

implants) and diagnostics.



"X4C wants to become a leader in innovative coating solution for biotechnology applications. We are looking for potential partners in medical devices and diagnosis applications thanks to the encouraging results of our R&D."

key figures 2018	
FTE's 31/12/2018	2 (1 on 31/12/2017)
sales 31/12/2018	2 k€ (50 k€ in 2017)

#### **CAPITAL STRUCTURE ON 31/12/2018**

shareholder	%
founder (Alice Mattiuzzi)	13
Mr Pagnoulle	7
Sambrinvest	23
Theodorus	34
Innovation Fund	23
total	100,00

In September 2018, X4C obtained a convertible loan of 100 k€ from the PreSeed Fund and expects a complementary grant of +- 150 k€ from the Walloon Region.

#### **KEY EVENTS AND ACTIONS IN 2018**

In 2018, X4C finalised the optimisation study with Cardiatis, a company specialized in stents. A collaborative agreement is in preparation with the company for a pre-clinical proof of concept (POC).

Samples of calix[4] arenes and coated nanoparticles have been sold to academic laboratories to companies specialised in diagnosis.

In R&D, X4C is developing and validating new extremely stable surface coatings with various properties for medical device applications.

#### **EXPECTATIONS 2019**

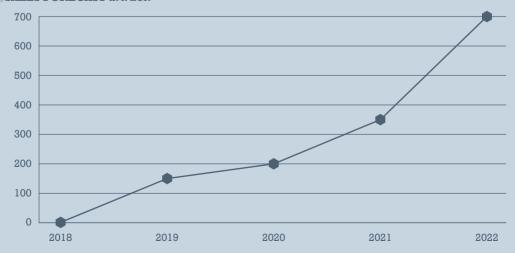
The first objective is to sign joined development agreements.

The second is to find new potential partners in medical devices (Balt, Physiol), in diagnostic (Unisensor, Horiba, GNA Biosolutions, ...) and in coating for biotechnological applications.

The R&D will focus on the diagnostics sector.

With the help of the expected grant of the Walloon region, X4C will hire a business developer and a capital increase is foreseen in August 2019.

#### SALES FORECAST in k EUR



# **Fyteko**



#### COMPANY DESCRIPTION

Sector: Biosciences

**Activity:** Organic biostimulants to boost plant resistance **Founders:** Guillaume Wegria & Juan Carlos Cabrera

Registered Office: 4 Allée de la Recherche,

1070 Brussels

**Board Member representing IF in Fyteko:** 

Caroline Limbosch

Fyteko was created in 2014 in Brussels and develops innovative novel bio-based solutions to help crops resist under adverse climate conditions. Fyteko has patented the world's first chemically well-defined molecule with a precise and specific, scientifically proven, mode of action. In field conditions, Nurseed & Nurpray, Fyteko's first products, improve abiotic stress resistance and crops' recovery up to 50% after drought.

This new generation of 100% natural, non-toxic and eco-friendly bio-stimulants is a real breakthrough in crops stress management. Structurally well-defined (bio) compounds and an identified 'precise' mode of action are at the core of agriculture 3.0.

"There's nothing wrong with staying small and bootstrapping. You can do big things with a small team and we are currently proving it. In 2018 we achieved impressive field results with our clients! We really believe that this is going to work and that Fyteko will be a game changer in the Agritech world."



key figures 2018	
FTE's 31/12/2018	5 (5 in 2017)
sales 31/12/2018	8 k€ (Samples)

#### **CAPITAL STRUCTURE ON 31/12/2018**

shareholder		%
founders		56.4
Innovation Fur	nd	24.0
Chemium		19.6
total		100,00

Fyteko raised 2 Mo€ in 2018, from Innovation Fund and Chemium. This round will cover the regulatory, development and commercial costs necessary to get the products on the market by mid-2020.

#### **KEY EVENTS AND ACTIONS IN 2018**

NURSPRAY® (foliar spray) and NURSEED® (seed treatment) have been positively field tested by several clients. Commercial negotiations and product registrations are underway and could enable sales in 2019 with early adopters.

European reviewers are currently examining the patentability and we entered 46 countries in addition to EU. Fyteko has launched processes of mutual recognition in France and Spain. Fyteko is already working on new formulations (e.g. NURSOIL® a soil drench formulation) and on new active compounds.

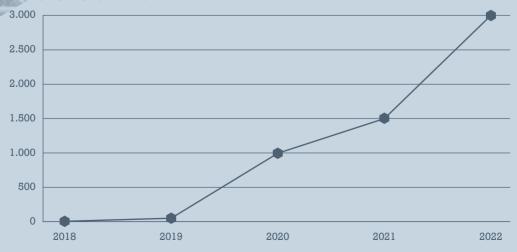
End of the year, Fyteko moved to a new location in Anderlecht to gain access to better laboratory and production facilities.

#### **EXPECTATIONS 2019**

The objective is to secure 50-100 k€ sales with early adopters and to get ready for the market launch in 2020.

The company will grow the team with a sales manager, an administrative assistant and a chemist; it will set-up its own production line for the active compounds, sign a major distribution contract and get the necessary regulatory approvals.

#### SALES FORECAST in k EUR



# Mathym



#### COMPANY DESCRIPTION

Sector: Materials Technology

Activity: Synthesis of colloidal nanoparticles solutions for

biomedical applications

Founders: Julien Alberici & Frederic Chaput Registered Office: 22 rue des Aulnes, 69410

Champagne au Mont d'Or, France

**Board Member representing IF in Mathym:** 

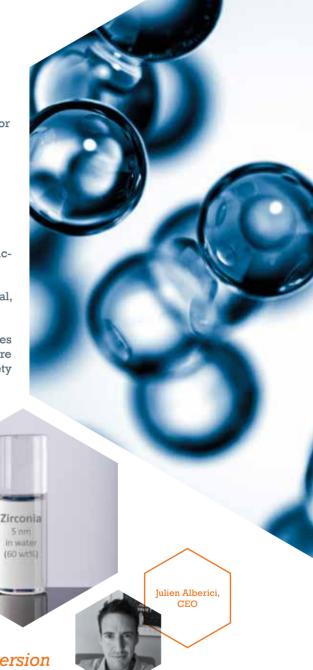
Stéphane Roussel (Solvay)

Mathym is committed to the development and manufacturing of innovative nanoparticle dispersions.

Founded in 2014, the company is active in the biomedical, ceramics, 3D-printing, optics and photonics areas.

Mathym develops and produces unique ultra-small oxides and fluorides nanoparticles dispersions. The latter are highly stable, homogeneous and concentrated in a variety of solvents and resins.

Mathym has a track record of fast and cost-effective scale-up and has been commercializing filyxio®, a dental radiopacifier, since late 2017.



"The new zirconia nanoparticles dispersion open new markets for Mathym."

key figures 2018	
FTE's 31/12/2018	11 (10 on 31/12/2017)
sales 2018	450k€ (270k€ in 2017)

shareholder	%
founder (Julien Alberici)	17,5
Octalfa	31,7
Kreaxi	19,9
Innovation Fund	13,0
Pertinence Invest	7,6
Ravenala	6,5
Patrick Lermusiaux	0,8
ESOP	3,0
total	100,00

Frédéric Chaput has left the company and his shares have been acquired by the other existing shareholders, slightly increasing the participation of Innovation Fund.

## **KEY EVENTS AND ACTIONS IN 2018**

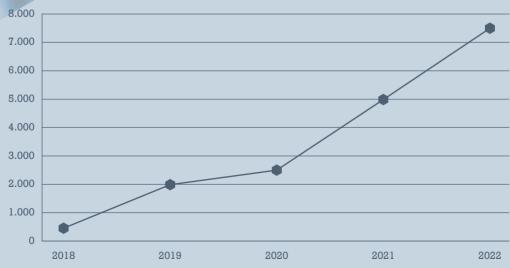
The sales of ytterbium fluoride (YbF3) in the dental sector have been in line with expectations.

Mathym initiated its strategy of income diversification based on its existing nanoparticles dispersions portfolio.

In addition, novel transparent zirconia grades have been developed, exhibiting unprecedented optical properties (IP 2018). A business developer has accordingly been appointed to identify potential clients and new applications.

## **EXPECTATIONS 2019**

Mathym will close R&D collaborations to develop new applications of its nanoparticles dispersions and will finalise the industrialisation study of its new zirconia manufacturing process.



## **Aerosint**

## aerosint

## COMPANY DESCRIPTION

Sector: Materials Technology

**Activity:** Making 3D printing truly multi-material **Founders:** M4KE IT, Edouard Moens de Hase

& Matthias Hick

Registered Office: Rue des Pôles, 1,4000 Liège Board Member representing IF in Aerosint:

Thierry Piret (Solvay)

Aerosint, created in 2016, is a spin-out of M4KE.IT. The company develops an innovative Additive Manufacturing Process.

The patented technology is a selective powder deposition system that enables full 3-dimensional control over material placement in powder bed fusion printing processes. The main invention is an alternate powder re-coating system that, instead of uniformly spreading one single powder material as in classical powder bed fusion processes, can selectively deposit two - or more - powders to form a single layer containing two - or more - materials. The powder can be a polymer, a metal or a ceramic.

Selective powder deposition enables a range of applications. The most compelling ones are material saving in polymers printing (reducing OPEX by up to 85%) and multi-material parts printing in both polymers and metals.

Today Aerosint has established research partnerships with the prestigious Fraunhofer IGCV research centre in Germany as well as with the Specialty Polymers Group of Solvay.

"2019 could be a pivotal year for Aerosint. If the company reaches the expected technical maturity, all the commercial efforts should finally pay-off and set up for revenue growth. The core team is strong, and will most likely grow further in 2019."



key figures 2018	
FTE's 31/12/2018	7 (5 in 2017)
sales 2018	44 k€ (0 in 2017)

shareholder	%
founders	20,8
M4KE.IT	24,4
Spinventure	21,0
Innovation Fund	21,0
Peter Mercelis	11,8
Sara Janssens	1,0
total	100,00

The capital was increased by 700 k € in July 2018. Spinventure & Innovation Fund were joined by Peter Mercelis, founder of Layerwise.

## **KEY EVENTS AND ACTIONS IN 2018**

Aerosint signed two major research collaborations in multi-metal laser fusion with Fraunhofer IGCV and in high performance polymers printing with Solvay.

The Fraunhofer agreement consists in the integration of Aerosint's technology inside an industrial metal laser melting system. The transformed machine is currently being used by the Fraunhofer for research on the printing of copper/steel parts.

The Solvay collaboration develops a zero-waste powder fusion printing process for specialty polymers. Printing high performance polymers such as PEEK and PPS is prohibitive due to excessive waste of powder.

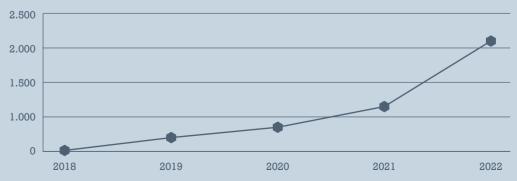
Aerosint negotiates proofs of concept (PoC's) with machine manufacturers.

## **EXPECTATIONS 2019**

The technology will reach the maturity level needed to sign the first commercial contracts with 3D printer manufacturers. Aerosint's objective is to integrate its technology in existing printers and subsequently negotiate co-development and licensing deals.

Aerosint wants to further qualify a number of alternative applications for its selective deposition technology, within the 3D printing industry and in other ones.

The company will participate in a number of collaborative R&D projects supported by the European Union and by the Walloon Region (DGO6).



**Proceedix** 

## proceedix

## COMPANY DESCRIPTION

Sector: Processes, Information Technology

Activity: Procedures, work instructions and checks made

paperless and mobile

Founders: Peter Verstraeten & Steven Serneels Registered Office: Ottergemsesteenweg Zuid 808,

Ghelamco Arena - Meet District, 9000 Ghent

**Board Member representing IF in Proceedix:** 

Pol-Henry Bonte

Proceedix developed a Software as a Service-based central platform to manage enterprise procedures, work instructions and inspections in an easy and intuitive way, while making the remote execution by the operator paperless and mobile.

After 2 years of development, Proceedix 3.0 was launched end of 2016 and the commercialisation started according to plan.





"The rate at which the enterprise market for mobile and wearable solutions matures determines the growth of the company. While the Industry 4.0 evolution will be a positive driver for the business in the near future, the company has to bridge the long sales cycles of its Global 5000 customer leads."

key figures 2018	
FTE's 31/12/2018	14 (13 in 2017)
sales 2018	800 k€ (450 in 2017)

shareholder	%
founders	78,25
Saffelberg Investment	8,7
Innovation Fund	8,7
Pentacon	4,35
total	100,00

A capital increase is foreseen in Q1 2019.

## **KEY EVENTS AND ACTIONS IN 2018**

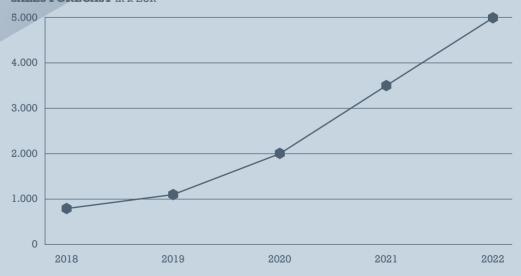
Proceedix realised the first on-premises installation of its platform. The Proceedix shared SaaS platform reached a monthly activity level of over 12.000 instructions and inspection executions by 1200 operators, spread over 25 customers. The company received, in the US, the supplier innovation award from its customer AGCO.

Proceedix closed a Value-Added-Reseller agreement with AMA, a French provider of a remote assistance platform using smart eyewear technology.

## **EXPECTATIONS 2019**

2019 will be a year of extension:

Proceedix will expand the commercialisation of the platform in the US market and in the pharma industry by collaborating with a leading software vendor and service provider. New functionalities will be added to handle specific process complexity for deskless workers (technicians, operators and inspectors) in pharma, in chemical and in assembly industries.



## **Iristick**



## COMPANY DESCRIPTION

**Sector:** Processes, Information Technology **Activity:** Wearables, smart safety glasses

**Founders:** Peter Verstraeten, Steven Serneels, Riemer Grootjans, Jasper Van Bourgognie & Prof. Maarten Kuijk

Registered Office: Lamorinierestraat 123,

2018 Antwerpen

**Board Member representing IF in Iristick:** 

Pol-Henry Bonte

Iristick designs, produces and sells industrial smart safety glasses to support enterprises in their digital transformation. Iristick smart glasses are rugged certified safety glasses with powerful optical zoom lens cameras, barcode scanner, voice commands, unrestricted field of view and 'full-shift' battery capacity. All combined in a unique and comfortable design.

Iristick enables hands-free operations in three domains:

- 'See-What-I-See' where an expert remotely supports a colleague during field-maintenance and training.
- 'Digital checklists' where hands-free instructions are provided and recorded when executing tasks.
- 'Pick-by-Vision', the new way of operating logistics warehouses.

Iristick smart eyewear is currently being used and tested by customers in maintenance, after-sales support, logistics, shop floor activities, quality control, tele-medicine and education.





"Augmented Reality & Virtual Reality is a vast emerging field that will impact the daily lives of many of us, at home and at work. We are proud that Iristick is part of this interesting journey. Based on initial customer feedback we look forward to live up to our promise in 2019."

key figures 2018	
FTE's 31/12/2018	10 (7 in 2017)
sales 2018	100 k€ (0 in 2017)

shareholder	%
founders	85,0
Saffelberg Investment	5,6
Innovation Fund	5,6
Pentacon	2,8
total	100,00

## **KEY EVENTS AND ACTIONS IN 2018**

In 2018 Iristick produced its first batch of hardware products. This "pilot-run" pipe-cleaned all operational and production steps and was the foundation of the hand-over to our production facility in Ieper.

The company closed its first commercial contracts with customers using the "iristick Z1" for "see-what-I-see"- applications in various sectors (mining, windmill maintenance, facility management and capital equipment after sales) in various countries: Belgium, France, Netherlands, South Africa,...

Iristick also finalised the first version of the "premium SDK" including advanced barcode scanning and voice commands.

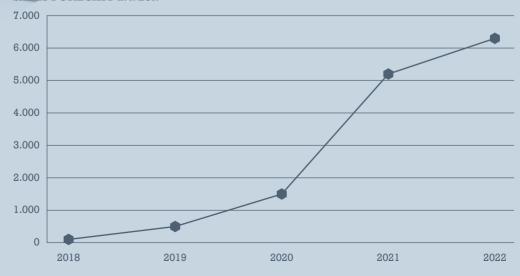
In June, Iristick received €1.9 million grant from the Horizon 2020 SME Instrument Phase 2. The company was also winner of a prestigious design Red Dot Award.

## **EXPECTATIONS 2019**

Iristick will increase its production capacity and volume, while maintaining an acceptable yield level.

The company will expand its network of commercial (software) partners to support SWIS, Digital procedures and pick-by-vision. It will increase its customer base, streamline its product offering and align corresponding marketing and sales approach.

Last but not least, Iristick will complete R&D and prototype of ATEX-version.



## **AllerInvest**



## COMPANY DESCRIPTION

Sector: Biosciences

Activity: Eradication of dust mites

Founders: Anne-Catherine Mailleux & Pierre Buffet Registered Office: Clos Chapelle aux Champs 30,

1200 Bruxelles

**Board Member representing IF in AllerInvest:** 

**Edith Coune** 

AllerInvest SA is a healthcare company active in the prevention and treatment of dust mite allergies. Allerinvest SA is 100% owner of Acar'Up Consumer Health, a spin-off of Domobios SA.

Acar'Up Consumer Health commercializes since 2015 a unique product that attracts the millions of dust mites that are living in the mattresses into a technical textile so that they can be eliminated in the washing machine. The product consists of a spray solution in combination with a technical textile.

A new spray, directly useable on bedlinen, has been developed in 2018.



"We have an excellent product according to consumers. We have solved the issue of use and pricing and expect to significantly increase our customer base."





key figures 2018	
FTE's 31/12/2018	2 (2 in 2017)
sales 2018	467 k€ (1 Mo€ in 2017)

shareholder	%
founders	7,8
InVentures	28,4
Spreds	3,2
Innovation Fund	16,8
Theodorus	14,5
Brustart	9,2
individuals	20,1
total	100,00

A capital increase of 500 k€ will take place in Q2 2019 at a lower share price than in 2017. InVentures, Theodorus, Brustart and Innovation Fund confirmed their participation.

## **KEY EVENTS AND ACTIONS IN 2018**

In 2018 the business did not run as foreseen.

In Belgium, the sales to pharmacists and wholesalers decreased to 450 k€, due to high initial inventories levels. The main issues are the complexity of the use of the product, a high retail price, the lack of 'allergy consciousness' and weak brand.

The geographical expansion was delayed by one year.

To address the challenges, a new generation spray formula was developed, that can be directly used on bedlinen.

AllerInvest has mandated the development of a self-test diagnostic of dust mites' allergy. Launch is foreseen mid-2019.

Contracts have been signed with distributors under ex-Aller brand in Switzerland, the Netherlands, Hong Kong & Singapore, or under distributor's own brand in France.

## **EXPECTATIONS 2019**

UBMILBENALLERGIE

ENTO E PREVENZIONE GIA AGLI ACARI

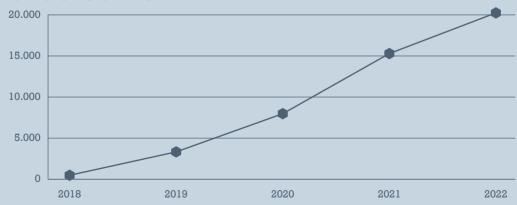
STAUBMILBEN AN. SE ZU ELIMINIERE

GLI ACARI DELLA E PERMETTENDO INARLI

Launches in the new countries are planned for the first half 2019. Acar'Up+ will be launched in Belgium in September.

2 to 4 additional countries will be launched in 2020.

A new CEO will be appointed in Q1 2019 and Mike Van Ganse will stay as Executive Chairman of the Board.



## Blue Foot Membranes



## COMPANY DESCRIPTION

Sector: Materials Technology

**Activity:** IPC® Back washable flat sheet membrane for

water treatment

Founders: VITO & Patrick Vanschoubroek
Registered Office: Gerard Mercatorstraat 31,

3920 Lommel

**Board Member representing IF in Blue Foot** 

Membrane: Joost Wille (Sioen)

Blue Foot Membranes (BFM) produces and commercialises the world-wide patented IPC® membranes, the world's first fully back-washable flat sheet membranes at a pressure up to 2 bar.

IPC® membranes are used in Membrane Bioreactors (MBR) for the treatment of industrial and municipal waste water. Installed in existing as well as in new Membrane Bioreactors, IPC® membranes can double the output capacity per square meter and substantially reduce the operational cost of an MBR.

The company is a spin-off of VITO.



"If we manage to industrialise IPC® production process and to execute our R&D program, fundamentals are formed for a bright future, capturing the global market interest."

key figures 2018	
FTE's 31/12/2018	9 (8 in 2017)
sales 2018	376k€ (122k€ in 2017)

shareholder	%
VITO	42,5
LRM	15,0
QBIC II	15,0
Innovation Fund	10,0
DuPont	10,0
management	7,5
total	100,00

Blue Foot Membranes is negotiating a new capital round which will take place in Q2 2019.

## **KEY EVENTS AND ACTIONS IN 2018**

Scale up challenges forced Blue Foot Membranes to revisit the existing production process, causing 9 months delay in the production planning. The company successfully executed a process control action plan.

The market interest in the IPC® value proposition remains very high.

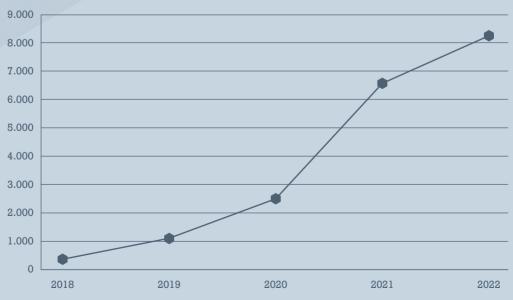
An international jury selected BFM as most promising "cleantech" start up at IWA in Tokyo (Japan).

## **EXPECTATIONS 2019**

Blue Foot Membrane's main challenge for 2019 is to install a fully automated production process ensuring the forecasted volumes and respecting its scrap rates targets.

There is a unique momentum in the market which BFM must capture.

The company will start a three years R&D road map to design the next generation IPC® module.



## REIN4CED



## COMPANY DESCRIPTION

Sector: Materials Technology

Activity: Carbon fibre reinforced composite products

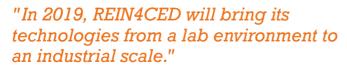
Founders: Michael Callens & Niels De Greef

Registered Office: Diependaalweg 4A, 3020 Winksele Board Member representing IF in REIN4CED:

Alexis Ponnouradjou (Hutchinson)

REIN4CED will manufacture impact-resistant and light-weight bicycle frames for brands wishing to offer their cyclists maximum performance with enhanced safety and durability. Carbon fibre composites, known from Formula 1 and race bikes, are light and strong but face sudden, brittle and dramatic fracture behaviour. To tackle this problem, REIN4CED has developed and patented a brand-new composite material. With this new material, and a completely new fully automated production process, REIN4CED will offer safe, durable and lightweight bicycle frames. The initial focus is on the bicycle market, followed by automotive and aerospace.







key figures 2018	
FTE's 31/12/2018	8 (4,5 in 2017)
sales 2018	50k€ (50k€ in 2017)

In December 2018, REIN4CED received approval for a grant of 1.2 Mo € "Strategic Transformation Support" from the Flemish Government. Also in December, REIN4CED received approval for a grant of  $500\,\mathrm{k}\,\mathrm{€}$  through VLAIO, Flanders Innovation & Entrepreneurship. Innovation Fund holds a share of 16.4% in REIN4CED.

## **KEY EVENTS AND ACTIONS IN 2018**

REIN4CED executed a direct mechanical comparison of REIN4CED bicycle frame part with an identical part manufactured in Asia. Thanks to this validation, REIN4CED signed a commercial collaboration agreement with a leading bicycle brand.

End of 2018, REIN4CED moved to a new facility near Leuven where the production line will be installed in 2019.

## **EXPECTATIONS 2019**

In 2019, the REIN4CED team plans to design, develop and produce a prototype of the commercial bicycle frame model. The production hall in REIN4CED's new facility will be prepared for installing state-of-the-art production equipment. This will allow for 0-zeros (very first production trials) on the automated production-line end of 2019 and series-production beginning of 2020.

# **TheraVet**

## THERAVET

## COMPANY DESCRIPTION

Sector: Biosciences

**Activity:** Veterinary products Founders: Enrico Bastianelli

Registered Office: Rue Auguste Piccard 48,

6041 Charleroi

**Board Member representing IF in TheraVet:** 

Christian Jourguin (Innovation Circle)

TheraVet, formerly BoneVet, develops veterinary products for the treatment of osteoarticular disorders in companion animals. Currently, the Company focuses on the development of two product lines: VISCO-VET and

BIOCERA-VET.

Theravet's mature product portfolio is composed of innovative, synthetic, biological and cellular products developed from both clinical-stage and marketed human

products.



"After the completion of VISCO-VET formulation/preclinical development and the progresses made in 2018, the whole TheraVet team is eager to initiate the proofof-concept studies in dog osteoarthritis and cruciate ligament deficiency, and to start our US activities."

Enrico Bastianelli, CEO

key figures 2018	
FTE's 31/12/2018	4,5

shareholder	%
founder	48,0
Theodorus III	13,6
Innovation Fund	13,6
LDE 2	6,8
Financière spin-off Luxembourgeoise	6,8
Business Angels	11,2
total	100,00

On the 29th of October 2018, following the achievement of milestones, a second capital increase, for a total consideration of 450.000€, was successfully completed with ao Theodorus & Innovation Fund.

## **KEY EVENTS AND ACTIONS IN 2018**

Theravet completed the formulation development and preclinical studies of VISCO-VET for the indications of dog osteoarthritis and cranial cruciate ligament deficiency (CCLD); it was granted "MUMS" (Minor Use, Minor Species) status, the equivalent of human orphan drug designation, status.

## **EXPECTATIONS 2019**

Theravet will launch the clinical proof-of-concept study in canine osteoarthritis in collaboration with the University of Liège (Belgium) and the clinical proof-of-concept study on a model of cranial cruciate ligament deficiency in dogs;

The company also plans to set up the US clinical operations in collaboration with the University of Texas A&M (College Station, Texas), ranked in the Top 10 of the US university of veterinarian training program.

## SALES FORECAST

The first revenues of the Company are expected for 2021-2022.

# Zeopore



## **COMPANY DESCRIPTION**

Sector: Materials & Process Technology

Activity: Commercialisation of improved zeolites by

mesoporisation

Founders: Danny Verboekend (CTO), Prof. Bert Sels, Martin d'Halluin (Development Engineer), Carl van Camp

& Bert Lagrain

Registered Office: Lelielaan 4, 3061 Leefdaal (Bertem)

**Board Member representing IF in Zeopore:** 

Pol-Henry Bonte

Zeopore Technologies was founded in 2017 as a spin-off from the University of Leuven. Zeopore develops a platform of proprietary technologies to improve the accessibility (hence effectiveness) of zeolites in petrochemical catalytic reactions. Its key differentiator is to attain tuneable porosity profiles beyond competition, while preserving the desired intrinsic zeolite properties, using exclusively scalable and cost effective processes.

More accessible (mesoporous) zeolites bring significant benefits: higher product selectivity at increased capacity utilisation and lower costs in catalyst regeneration. The net added value can reach 30 Mo \$ per catalytic converter unit per year.

"The key challenge for 2019 is to translate positive sample tests from catalyst manufacturers into long-term collaborations for specific industrial applications, as well as to further exploit our technique to tune porosity into catalytic benefits."



## key figures 2018

FTE's 31/12/2018

## CAPITAL STRUCTURE ON 31/12/2018

shareholder	%
founders & management	20,5
KULeuven	41,1
Gemma Frisius	19,2
Innovation Fund	19,2
total	100,00

Zeopore closed a 1 Mo€ financing round in April 2018, in which Innovation Fund invested 500.000€ for a 19.2% share, alongside the Gemma Frisius Fund. Three months later, the company obtained a VLAIO (Flemish Agency for Entrepreneurship) subsidy of 350 k€ to further expand its technology toolbox towards a broader range of zeolites and applications.

## **KEY EVENTS AND ACTIONS IN 2018**

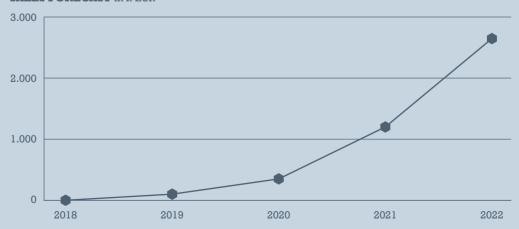
Zeopore Technologies has set up the core team, produced several pilot-scale samples for customer trials, and built a position as new technology provider.

Zeopore was able to promote and verify its value proposition to most top tier players in its targeted markets. These are currently pilot testing kg-scale samples of Zeopore's zeolites in their specific applications, and negotiations have started on co-development and commercialisation trajectories.

## **EXPECTATIONS 2019**

The positive market feedback from 2018 has resulted in an intensified demand for sampling and associated pilot testing at the end-user or catalyst manufacturer. These sample evaluation trajectories need to be translated into further co-development work to tune the technology towards specific industrial circumstances, a preparatory step towards licensing agreements.

A key observation is that Zeopore's ability to tune the porosity adds a whole new dimension towards optimal zeolite catalyst performance. Throughout 2019 this additional playing field will be explored via own catalytic testing projects, focusing on diesel and lubricant dewaxing.



## Univercells



## COMPANY DESCRIPTION

Sector: Biosciences

**Activity:** Biomanufacturing technology & commercialisation of solutions for vaccines and biotherapeutics

Founders: José Castillo & Hugues Bultot Registered Office: Rue Auguste Piccard 48,

6041 Gosselies

Board observer and Chairman of the audit committee representing IF in Univercells:

André Ostachkov

—

Univercells is a business-to-business provider focused on increasing the availability of affordable vaccines and biotherapeutics to address global health challenges. The company is developing a turnkey solution for a series of vaccines and biotherapeutics to be delivered at an affordable price. The proprietary core technologies and on the continuous process intensification approach lead to a production that has a smaller footprint, and significantly lower overall capital and operational costs.

Founded in 2013 by Hugues Bultot and José Castillo, the company is based in Gosselies (Belgium). It has received a strong support from the Bill & Melinda Gates Foundation.

Hugues Bultot,



"Univercells is dedicated to deliver affordable biologics around the world by innovating flexible, scalable and accessible vaccines and biotherapeutics manufacturing solutions."

key figures 2018	
FTE's 31/12/2018	101
sales 2018	1,174k€

shareholder	%
founders	42,6
Takeda	15,1
GHIF	12,2
Innovation Fund	1,5
others	28,6
total	100,00

Mid-2018, Univercells raised €16 million in Series B financing round led by Global Health Investment Fund and joined by Korea Investment Partners, The Innovation Fund, Inventures II and private investors federated by The Club Deal SA.

Innovation Fund committed for 1 Mo€ in 2 tranches (second in March 2019).

## **KEY EVENTS AND ACTIONS IN 2018**

Early 2018, Univercells launched the development of its innovative recombinant protein platform, paying the way for the cost-effective biosimilar production.

Furthermore, Univercells inaugurated in May a new facility in Nivelles to pursue the development and assembly of its vaccine manufacturing system NevoLine $^{\text{TM}}$  for the production of polio vaccines.

End of 2018, Univercells reached the milestone of 100 collaborators gathering multiple nationalities and expertise.

## **EXPECTATIONS 2019**

In January 2019, Univercells presented its affordable bioproduction system NevoLine delivering inactivated polio vaccine (sIPV) for less than \$0.30 per dose. This system was initially developed as part of a grant awarded by the Bill & Melinda Gates Foundation.

Univercells will continue to develop its low-cost polio vaccine manufacturing technology to scale-up production.

Furthermore, the biotech is developing a portfolio of high-quality vaccines and biosimilars and seeking international partnerships to produce and commercialise affordable vaccines locally.





# Aloxy



## COMPANY DESCRIPTION

**Sector:** Processes, Information Technology **Activity:** Industrial process analysis, monitoring

& prediction application

Founders: Maarten Weyn, Jan Coppens, Carl Stevens

& Glenn Ergeerts

Registered Office: The Beacon, Sint-Pietersvliet 7,

2000 Antwerp

**Board Member representing IF in Aloxy:** 

Philip Buskens (BASF)

Aloxy offers a modular Industrial Internet of Things platform for the process and chemical industry. Our goal is to improve safety and efficiency, to automate processes and to deliver actionable insights into industrial operations. Aloxy's initial product-line consists of a solution for manual valve positioning by simply attaching a wireless Aloxy device to the hand wheel or lever of the valve to remotely monitor its position. In addition, Aloxy builds a solution for monitoring the progress of regular maintenance and shutdowns. Aloxy is a spin-off of imec and the University of Antwerp.

In 2018, Aloxy launched several proof-of-concept projects at different multinational chemical companies such as Solvay and BASF.





"An important milestone for Aloxy is to acquire ATEX certification, which will allow us to roll out our solution for manual valve positioning to many operational sites."

key figures 2018	
FTE's 31/12/2018	7
sales 2018	58k€

shareholder	%
founders	31,1
QBIC II	15,6
Fabricom	15,6
Innovation Fund	15,6
Fidimec	6,2
Cofoundry	6,2
Imec Istart Fund	3,1
Uantwerpen	1,6
ESOP	5,0
total	100,00

Aloxy was founded in November 2017 and raised a Series A round in July 2018. Innovation Fund committed for 500 k€ in 2 tranches. The second is foreseen in 2019, conditional to milestones.

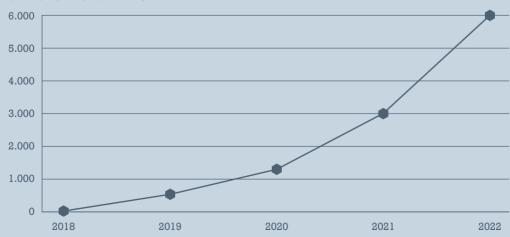
## **KEY EVENTS AND ACTIONS IN 2018**

In 2018, the Aloxy solution for manual valve positioning was tested on site with several customers, which led to feedback and improvements to the solution.

In addition, all necessary steps were taken to prepare ATEX certification and setting up volume production of the sensor. In April, Aloxy won the BEMAS digital innovation award 2018. By the end of the year, Aloxy moved to its new offices in The Beacon, Antwerp.

## **EXPECTATIONS 2019**

In 2019, it is the ambition of Aloxy to successfully finalise the pilot projects and move from prototype-stage to a commercial product. An important milestone will be the ATEX certification for the Aloxy sensor. Aloxy will then roll out the solutions for manual valve positioning.



# Circular Organics



## **COMPANY DESCRIPTION**

Sector: Circular economy

Activity: Insect based conversion of organic waste into

protein, oil and chitin **Founders:** Johan Jacobs

Registered Office: Slachthuisstraat 120/6, 2300 Turnhout

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Millibeter was founded in 2012 by Johan Jacobs, to convert organic waste using the Black Soldier Fly (Hermetia illucens). Millibeter has developed and patented the technologies to breed the fly, rear its larvae on organic waste and extract high-quality products. The insect protein meal, lipids and chitin are great ingredients for the aquaculture sector, and have many technical applications. Its team of experts has managed several research projects, including the Kempen Insect Cluster. A friendly takeover by AgriProtein took place end of 2018 and the company has been rebranded as Circular Organics NV and is responsible for the Benelux market.



"In 2019, insect bioconversion will go from pilot scale to industrial production: low grade waste will be transformed into quality products, using insects, on the scale that has true impact."

key figures 2018	
FTE's 31/12/2018	8
sales 2018	145k€

Circular Organics NV successfully raised over 1 million euro in capital from Innovation Fund and two private investors in November 2018. Subsequently, Circular Organics NV was friendly acquired by AgriProtein, the global market leader in insect bioconversion.

Innovation Fund negotiated a convertible loan with AgriProtein, the conversion in 2022 being subject to 3 conditions: a first unit in Flanders within 2 years; the installation of the European R&D centre in Belgium by 2021 with at least 10 FTE's; and the capital expenditure's decision for a second unit in Belgium by 2021.

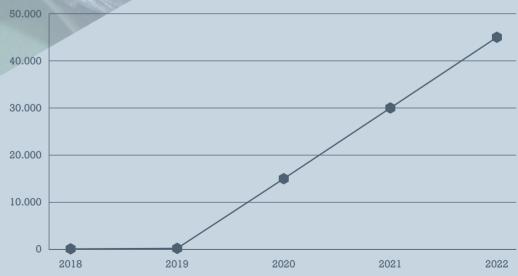
## **KEY EVENTS AND ACTIONS IN 2018**

The main activity of 2018 has been the capital increase, resulting in the subsequent acquisition by AgriProtein, which will bring Millibeter's technology to the world. The rolling-out of large-scale commercial production facilities will also strengthen the pioneering role of Belgium in the quickly growing insect industry.

## **EXPECTATIONS 2019**

We expect to break ground in 2019 on at least one factory, with an intake capacity of 80.000 ton of side streams per year, and at least one more in 2020.

The R&D team is being expanded, and new research projects will be launched from our pilot factory in Turnhout.



# Daphne



## COMPANY DESCRIPTION

Sector: Processes, Circular economy
Activity: Emissions control technology
Founders: Mario Michan, Bjorn Asplind, EPFL
Registered Office: EPFL Innovation Park,

Chemin de la Raye 13, CH-1024 Ecublens, Switzerland

**Board Member representing IF in Daphne** 

Technology: Pol-Henry Bonte

Daphne Technology SA is a company incorporated in Switzerland and developing emissions control technology to help the petrochemical, power and transportation industries to reduce air emissions to the levels required by international and national regulations.

Daphne technology electro-precipitates the NOx and SOx contained in exhaust fumes and transforms them in fertilizer

Its patented solutions can be miniaturized and are especially well-suited to meet the requirements of marine vessels.



"We have just closed our first investment round and have now the required fuel to get things moving. We are under tremendous time pressure to deliver a product by 2020 and need to find key talent to join our team."

key figures 2018	
FTE's 31/12/2018	4
sales 2018	0

shareholder	%
founders	51,3
Saudi Aramco Energy Venture	21,4
Innovation Fund	7,4
Dumas	7,3
VentureKick	1,1
others	1,5
ESOP	10,0
total	100,00

On December 18th, Innovation Fund invested, subject to milestones, 870 k CHF, in Daphne for a share of 7.4% in its capital.

## **KEY EVENTS AND ACTIONS IN 2018**

The major achievement of 2018 was the capital increase of 4.4 Mo CHF, in order to develop a first pilot prototype for use in a diesel marine vessel.

Daphne won several awards and grants in Switzerland and in the EU, including Venture Kick (CH), Climate KIC Stage I and Stage II (EU), SPECO (Canton Vaud) and top 100 Swiss Startups (place  $34^{th}$  and  $4^{th}$  for new startups)

Daphne has been granted a patent for its electron radiation technology and has filed multiple additional patents regarding its process and apparatus.

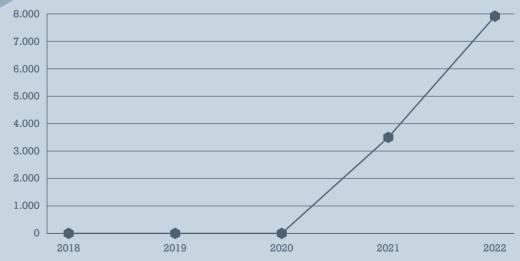
## **EXPECTATIONS 2019**

In 2019 Daphne expects to develop its first pilot prototype on a marine diesel engine in a land installation in its facility in Sweden (Daphne Technology AB).

This prototype is the first step towards certification of the company's product for the marine industry.

The team will grow up to 9 FTE.

## SALES FORECAST in Mo CHF



## DoseVue



## COMPANY DESCRIPTION

Sector: Medical Devices

Activity: Dosimetry equipment for cancer therapy Founders: Emiliano d'Agostino, SCK-CEN Registered Office: Ispralaan 37, 2400 Mol Board Member representing IF in DoseVue:

André Ostachkov

DoseVue N.V. was founded by E. D'Agostino and the Belgian Nuclear Research Center (SCK-CEN). The company designs and manufactures radiation sensors, which are easy to use and have a minimal impact on the clinical workflow. Its ultimate goal is to support optimal use of radiation, by means of systematic and accurate dose monitoring in real time.

DoseVue's equipment will prevent, in some specific radiation therapies, the frequent issue of hitting healthy tissues.

Its first technology, DoseWire, makes use of optical fibres to monitor doses in real-time.





"At present we are rushing to complete the development of the patient device and get its regulatory approval. As part of this process clinical tests are being organized with Sint Augustinus hospital (Antwerp)."

key figures 2018	
FTE's 31/12/2018	2,6
sales 2018	39k€

shareholder	%
SCK-CEN	44,7
Emiliano d'Agostino	5,1
LRM	16,6
Innovation Fund	27,7
ESOP	6,0
total	100,00

End of 2018, DoseVue concluded a capital increase of more than 1 Mo € with historical shareholder SCK-CEN, Innovation Fund and LRM.

## **KEY EVENTS AND ACTIONS IN 2018**

DoseVue launched its first devices for preclinical use and sold the first 5 of them, to be used for radio monitoring. The company expanded its network of hospitals (France, Italy, Belgium...) to enhance technology's recognition and market penetration.

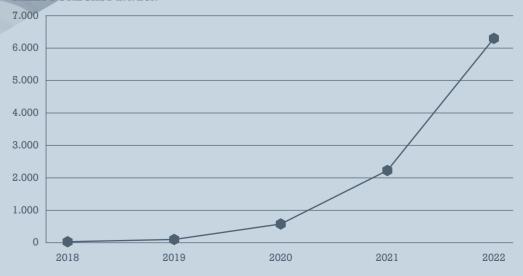
It also signed a collaboration agreement with the company XStrahl, for preclinical and clinical activities.

DoseVue obtained the ISO13485:2016 accreditation.

## **EXPECTATIONS 2019**

In 2019, DoseVue will complete the development of its first clinical device and intends to launch DoseWire in-vivo. This requires the regulatory approval, ao CE marking for patient device.

The company will look for non-dilutive funding and expand its team.



## **PUR VER**



## COMPANY DESCRIPTION

CI -

Sector: Circular economy

Activity: Organic waste processing; production of

vermicompost

Founders: Jean-Pierre Tondreau, Baudouin de Selliers

& Alexandre Meire

Registered Office: 2 Passage des Déportés,

5030 Gembloux

**Board Member representing IF in PUR VER:** 

**Edith Coune** 

—

PUR VER produces and sells Vermicompost, a natural fertiliser produced by composting worms. The company wants to become the European leader.

With its current 6 production lines in its site in Pecq (~Tournai), PUR VER has demonstrated the efficiency of its technology and the market's demand for its high quality soil amendment. Clients at this stage are mainly organic vegetable producers, municipalities, golf resorts and wholesalers (garden centres and potting soil producers).

PUR VER, originated from Gembloux Agro-Bio Tech (ULg), has a strong scientific knowledge in vermicomposting and in the agronomical value of vermicompost. The scientist of its small team pursues R&D in the field of vermicompost and derivates, in collaboration with different universities and research centres.





"2018 was an exceptional year for PUR VER. Demand for our vermicompost boomed. Backed by three new investors, we are ready to break ground on expanding our production site. Ambition is high and so is motivation!"

key figures 2018	
FTE's 31/12/2018	3
sales 2018	160k€

shareholder	%
founders	20,5
Hoccinvest	13,6
SRIW Environnement	16,1
Chemium	16,1
Innovation Fund	16,1
Business Angels & individuals	17,6
total	100,00

In December 2018, PUR VER increased its capital by more than 1.8 Mo €, with existing share-holders and 3 new entrants: SRIW Environment, Chemium and Innovation Fund. Innovation Fund invested 506 k €.

## **KEY EVENTS AND ACTIONS IN 2018**

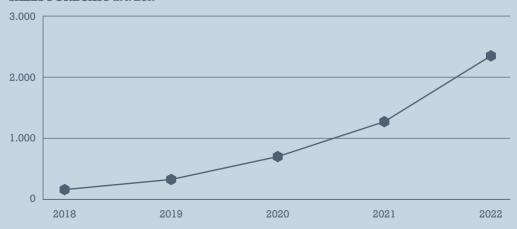
During 2018, PUR VER encountered a sudden and strong decrease in its worms' population, with a subsequent drop of its vermicompost production. The causes were identified and remedies put in place.

The company started developing a liquid bio stimulant and prepared the extension of the production site in Pecq.

## **EXPECTATIONS 2019**

In 2019, PUR VER will triple its production capacity in Pecq, by adding 6 lines of 150 m² each and increasing the productivity of the existing production lines.

The company will also launch its new liquid bio stimulant complementary to the solid vermicompost. It will offer a complete organic fertilization solution to the consumers and open new fields of application: vineyards, hydroponics, ...







## INNOVATION FUND

BluePoint
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1030 Brussels

## CONTACT

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