

Solvay Innovation Trophy 2006

Innovation is everyone's business

THE INNOVATION TROPHY BLENDS EXPERTISE, COMPETENCE AND KNOW-HOW WITH CREATIVITY, PASSION AND ENERGY. GROUP INNOVATION CHAMPION BRIGITTE LAURENT REVIEWS WITH US WHY SOLVAY ORGANIZES AN INNOVATION TROPHY, HOW IT HAS EVOLVED OVER TIME, AND THE MAIN EMPHASIS OF THE 2006 EDITION.

The Solvay Innovation Trophy, a recurring landmark in the Group's drive for Innovation, will be held this year for the fourth time. Each successive Innovation Trophy since 1999 has been larger than its predecessor and attracted growing attention, both inside and outside the Group. Organizing it is a project in itself, involving a number of employees throughout the year. Despite its potent symbolism for the entire Innovation drive, this Group event is in fact only just one of a series of initiatives. To mention trophies only, we have the *Trophy* and *Creativity Awards* in the Chemicals Sector, the *Pioneer Awards* in Pharmaceuticals, various site-level Innovation Trophies, *Innodrive* at Pipelife, and the *Solvin Award* for innovative PVC clients, all contributing to dynamizing our creative capacity. >>>



Encouraging the teams

The Innovation Trophy exists to **recognize** the contributions that teams make through their innovations, and more generally to **encourage** the innovation reflex. But why **recognize** only the handful of innovations that make it to a trophy? In any competitive environment, healthy emulation inspires us to be constantly setting ourselves new challenges. In a business corporation it's the same thing: Innovation progresses by employees pursuing ambitious objectives. The important thing is to have lots of projects participating. When we say **encourage**, of course the Trophy stimulates Innovation. But it is important not to see it in isolation, but as part of a drive to embed Innovation step by step into employees' behaviour and thinking. In 2003 the Group published its Innovation Charter and invited everyone to contribute to the drive. In 2004 Group managers were asked at their annual assessment interviews to rank their contributions towards Innovation on a scale of zero to four and defend their choice. In 2005, all managers, in consultation with their superiors, set themselves one "Innovation" objective, to be included in their personal performance assessment in 2006.

Measuring and comparing project quality

The Trophy is a very special event in several ways. First as an opportunity to ask what benefits earlier trophies have brought. What has become of the projects presented then? What new products and processes have they given us? How have they taken us further along the learning curve?

Pre-selecting projects from their own units is also a privileged moment for managers to see what direction Innovation is moving in, how far projects have advanced, how good they are; an exercise that becomes more difficult each time with the rising numbers and quality of entries.

The Trophy is also an occasion to exchange ideas and give visibility to all proposed projects. Through Solia (<http://innovation.solvay.com>) and *Solvay live* everyone can learn about ongoing initiatives, establish contacts and share their knowledge. For Solvay, the Trophy is also time to reflect on challenges and priorities. As Jacques van Rijckevorsel, General Manager of the Plastics Sector and Group Innovation Sponsor



INTRODUCING OUR JURY

The jury is presided by Jacques van Rijckevorsel

> External Jury



ALPHEUS BINGHAM

CEO, InnoCentive. Board member, Fast Track Systems, Collaborative Drug Discovery, Phase Forward, YourEncore, Coalesix. Visiting Scholar, National Centre for Supercomputing Application, University of Illinois (US).

"I am working on meta-innovation (innovating on how we innovate), and looking for new collaboration models. Without risk, innovation is doomed. The Trophy encourages appropriate risk-taking. One of the best strategies for remaining creative is to be surrounded by creative people and ideas. So I look forward to learning about the innovations and meeting all of the nominees."



JOHN BUTT

CEO, Conduit Ventures (UK). Former Director, Citigroup Global Markets, and Price Waterhouse LLP

International Privatization Group. Biochemistry degree from University of St. Andrews. MBA from University of North Carolina (US).

"Innovation comes not only from having the most elegant scientific discovery, but also putting in place the required systems to extract value from the innovation. The Trophy sends the right signals to talented individuals that an innovation culture is supported and potentially rewarding. As a jury member I look forward to exchanging ideas on the challenges facing new technologies, and the different criteria and steps required to bring such technologies to the market."



LUDO VAN DER HEYDEN

Solvay Chair in Technological Innovation, INSEAD (France). Wendel Chair in the Large Family

Firm, INSEAD. Recipient of Mercurius Award from Fedis Association, and ECCH European Case Award 2005. Formerly on the faculty of Yale and Harvard Universities (US).

"I am involved in numerous projects focused on innovation in business models. I direct INSEAD's Advanced Management Program, which increasingly addresses the need for innovation. At the individual, team and organizational levels, the Trophy is a meaningful way to communicate, celebrate, and prepare for the future. It is also a unique way to take the pulse of innovation inside a great international company."

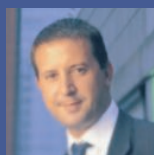
> Internal Jury



HERVÉ LEBRET
 Manager, Innogrants, Ecole Polytechnique Fédérale de Lausanne (Switzerland). Formerly with Index Ventures.

Former Dean of Studies, ENSTA. PhD in electrical engineering, Université de Rennes (France).

"My activity at EPFL is exclusively about innovation: identifying and supporting innovative projects. I try to stimulate risk taking, as innovation is also about being more tolerant to risk and possible failure. I organize events and invite innovators to share their experiences. People need role models. This Trophy is an example that can encourage others to develop their own projects."



BRUNO VAN POTTELSBERGHE
 Solvay Innovation Chair, Solvay Business School, Université Libre de Bruxelles (Belgium).

Chief Economist, European Patent Office. Formerly Vice-president, Solvay Business School, and Director of MBA and International Exchange Programmes.

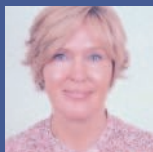
"Innovation and intellectual property are my daily concerns: I teach innovation economics and management. This Trophy shows management's dedication to an innovation culture. It improves the company's image by emphasizing its social role. And it rewards the creativity and innovation of employees. I enjoy discovering the forward thinking teams and their projects, as well as the intense Committee debates."



RENATE A. WEISSENHORN
 Head of the European Commission's DG Entreprise "Support for Innovation" unit.

Formerly Head of Enterprise Unit (DG/unit A6). Degrees in accountancy and foreign relations, University of Economics in Vienna (Austria).

"My Unit helps companies make better use of innovative technologies. It also assists innovation development in the European Regions. I am familiar with the daily challenges faced by innovative entrepreneurs, companies and innovation support structures. The Trophy is a new service to get ideas to the market faster and promote cooperation between the public and private sectors. I hope to get insight into how an innovation system works within an industrial group."



CAROLYN EGBERT
 Representing the Pharmaceutical Sector and the USA. Global Head of Human Resources, Solvay

Pharmaceuticals. Formerly in-house counsel, Merrell-Dow Pharmaceutical Company. Degrees in pharmacology and law (US).

"Innovation is a major key to sustainable growth and it continues Solvay's long tradition of valuable contributions to consumers and markets everywhere. The benefits of the Trophy are enormous. It is a symbol for one of the several core principles that define Solvay. As a jury member I will receive a deeper understanding of the commitment that Solvay and its employees make to sustain innovation."



MAURO FURLANETTO
 Representing the Plastics Sector and South America. Manager Plastics Sector Supply Chain Mercosur, Solvay

Indupa (Argentine). With Solvay since 1980 as electrical engineer, process engineer and industrial development manager.

"Innovation has to be considered as the mechanism to differentiate a company from its competitors. The Trophy increases employee motivation worldwide, boosting the commitment to the Mission and Values of Solvay group. As a jury member I will have an exclusive opportunity to share innovation experiences and bring new ideas to Mercosur."



ANDRÉ NOTHOMB
 Representing the Chemicals Sector and Asia. Director, RBU Barium/Strontium Asia. President, Chemicals Sector/Asia,

Solvay Korea. With Solvay since 1989 in Singapore, Japan and Korea. Graduated from Solvay Business School, ULB.

"The Daehan Specialty Chemicals team won two Chemicals Sector innovation trophies. I believe innovation is essential for a company to survive because the days of our existing businesses and practices are numbered. As a jury member I hope to get new inspiration and a chance to confront our approaches with those of real experts."



JEAN-MARIE SOLVAY
 Representing shareholders and New Business Development (NBD). Director, member of the New

Business Board, Solvay. CEO, Real Estate Development, Teimmo. CEO, Germany Real Estate Construction and Development, Albrecht re GmbH & Co.KG Formerly CFO, Business Development, Iridian Technologies (Switzerland), and CEO, Helitradewinds (US).

"Throughout my career I have always been confronted with the urgent need to find innovative solutions to fulfil customers' needs. In each case the challenge is unique and exhilarating and customer satisfaction determines whether a business lives or dies. This Trophy fosters the spirit of innovation and gives recognition to all those working hard to serve the customer."



CHRISTINE TAHON
 Representing the Functional Managements and Europe. HSE Director, with Solvay

since 1980 working in R&D materials, engineering & construction, and the alkali sector (NOH/Belgium). Degrees in civil and material sciences engineering, Faculté Poytechnique de Mons (Belgium).

"Many current HSE issues require new approaches and technologies, especially those that are environmentally friendly. Innovation visibility is essential to support Solvay's global approach. The Trophy event is one way to achieve this. Additional support for innovation is needed to insure continuous development."



NOËL TRITZ
 Representing the European Works Council (EWC). Founder member of the EWC, Secretary since 2000.

Joined Solvay Laboratory Division (Tavaux /France) in 1968. Quickly became involved in trade unionism (May 1968), first in the local works council, then at a national level.

"My engagement on the local, national and European levels emphasizes the need for innovation so that tomorrow chemistry will still have a place in Europe. It is also necessary to be imaginative in developing renewable energy and managing the burden of waste. The Group must remain a leader in order to insure its long term economic health."



“The real Challenge is making optimal use of the energy of the 1 381 employees involved and of the 312 projects counted this year, as well as all the other projects.”

Brigitte Laurent,
Group Innovation
Champion.

»»» reminds us: *“Innovation is a must for every enterprise. We have to innovate fast and well and construct a future that breaks with the present.”*

Concrete outcomes

Many of the winning projects from earlier trophies – in particular new products and new processes – are today household names at Solvay and making significant contributions to growth and performance. Everyone at Solvay knows Peptisyntha, now part of the SBU Molecular Solutions, and Vinyloop®, both winners in 1999. The 2000 winners included Hugo & AMAP

(performance improvement) and “Turnaround at Tavaux” (management improvement), a project that got a whole site working together as a team. Major investments have since been made in the USA to bring into

production Energy’s “PZEV fuel system”, one of the six 2003 winners. Also widely deployed since then is the “H₂O₂ production reviewed and corrected” project, the winner in the “Performance Improvement” category. It is important to stress that other less media-grabbing projects have been just as fruitful as Innovation Trophy winners and that certain projects would probably have made it without the Trophy. But the Trophy can strengthen an image, open doors and motivate teams.

Each new Trophy is more successful than the last: 312 projects were submitted for this 4th edition. The various managements pre-selected 150 projects. 96 will finally be presented to the jury, who will plunge into this voluminous dossier during these two summer months. This uptrend in the number of initiatives is also reflected in the Group Innovation Scorecard indicator which consolidates the number of New Business projects across the various entities: 223 projects in 2003, 266 in 2004 and 308 in 2005.

This process is clearly paying dividends in terms of keenness to develop new projects. It is also demonstrating just how much

Innovation Champions on record

The Innovation Champions network was created in 2004 and is led by Group Innovation Champion Brigitte Laurent. Each SBU, CC and BSC in turn has its own Innovation Champion, tasked with promoting and organizing its own Innovation drive. Innovation Champions' profiles vary according to the entities they represent: more R&D-minded in Specialties entities, more quality coordination-oriented in entities concerned with performance improvement, more project management-minded elsewhere in the organization, etc. Our Innovation Champions play a vital role in the deployment of Innovation in the Group. It is they who have been the driving force behind the early stages of this fourth Solvay Innovation Trophy. 19 of them give their testimonies.

ANTOINE AMORY

INTELLECTUAL ASSETS MANAGEMENT

We were facing enormous technical problems getting our project launched. At one point we were close to abandoning it because all the objectives seemed far too ambitious given the limited internal resources available to us. The problems were, however, solved in an innovative way by setting up a number of partnerships which provided the missing expertise.

JOACHIM BELT

CHEMICALS BUSINESS DEVELOPMENT

As the Innovation Champion of SBU Fluor, and then of Chemicals Sector Business Deployment, I had the opportunity to organize Innovation Trophies for this SBU and then for the Chemicals Sector, in 2005, with Georges Snoeck. This was a tremendous experience too! It is of course very hard work gathering all the projects, preparing the selection session with the jury and defining

the prize-giving ceremony. But it is also very impressive to see how Innovation is being integrated into Group strategy and how the Chemicals Sector is moving more and more into Specialties.

FRANÇOIS CARETTE

ENGINEERING, CONSTRUCTION AND MAINTENANCE COMPETENCE CENTRE

Collecting projects for the Innovation Trophy was a valuable opportunity to discover the many competences, skills

and creativity existing within my own entity. The toughest part was whittling down the lists of candidates we finally put forward for the Group Trophy, a long and arduous task given the enthusiasm of the project teams.

GRAHAM CARR

SBU CAPROLACTONES

As Innovation Champion (not my word!), I have been active in our small SBU Caprolactones since 1999. I have coordinated the presentation of



creativity there is in the Group and the value of healthy emulation. *“The real Challenge is making optimal use of the energy of the 1 381 employees involved and of the 312 projects counted this year, as well as all the other projects across the Group. This is why the many initiatives by different entities to organize their own Awards are just as important”*, concludes Group Innovation Champion Brigitte Laurent.

We can also draw parallels here with another Scorecard indicator which shows the evolution of the number of ideas collected per employee – 0.52 in 2003, 0.56 in 2004, 0.69 in 2005 – essentially via the ideas box.

The 2006 Trophy: growth and competitiveness

“For the 2006 Solvay Innovation Trophy, we have kept the best of the previous trophies. We have also launched some new ideas to give the Trophy even greater value”, Brigitte Laurent tells us. *“The categories are the same as in 2003 (New Business, Customer-Oriented Projects, Performance Improvement, Management Improvement, Sustainable Development and Citizenship), except that ‘Transposable Innovations’ becomes ‘Replicated Innovations’ By shifting from ‘transposable’ to ‘replicated’, we want to place the accent on what has actually been implemented.”*

The call for projects has been coordinated by the Innovation >>>

The recipe for successful Innovation

- Take a good handful of objectives: make sure they are fresh and good-sized. Remove at once any mediocre or timid objectives. You need **ambitious objectives**.
- Place these objectives in the hands of a motivated management team which is not afraid to take risks and make mistakes. It is **management commitment** which makes the cake rise.
- Marinate in a favourable **corporate culture**. After of course carefully clarifying the concepts of calculated risk, responsibility and the independence of your guests. Reserve in a separate bowl: be careful at this stage to prevent the dough from collapsing.
- Beat everything together as a **team**, as a lone wolf is a lost wolf. Daringly add a dash of **ingredients from elsewhere**: exotic fruits, selected spices... Originality is a key component of novelty.
- Place in the oven in a dish generously buttered with **communication**, watch the cooking process carefully and banish improvisation, because Innovation is very different from fantasy: big kitchens need to be **run tightly**.
- Before serving, don't forget a pinch of **reward**, but in particular decorate with **recognition** and serve with brio: this will make it all the more tasty.
- And bear in mind that Innovation is an appetite-whetter: your guests will ask for more!

several files, two of which have won Chemicals Sector trophies. The Innovation Trophy 2003 was an unforgettable experience for me, even though we came away empty-handed. I will never forget the artistic performance to display chemistry.

PIERRE COERS HEALTH-SAFETY-ENVIRONMENT

Being a Champion is not all fame and glory. This morning I passed a facetious, if not ironical colleague, who once again greeted me with a loud “Aaah, good morning Chammpiyon” (pronounced like the sound of a popping cork). My Outlook awakes from its slumber and brings me down to earth with a bump: scorecards, datasheets, Trophy, all awaiting my attention, deadlines, deadlines, deadlines... the flames of Innovation attack my diary... Where can I flee to?

ÉTIENNE COLLIGNON FRANCE

The French Innovation Champions spent an entire day together to speed up the

processing of twenty or so ideas. They invited project authors, experts, managers and employees to a “Beehive” meeting. Two hours of spontaneous exchanges between these 60 people served to invalidate or redirect certain ideas and accelerate the processing of others. Recognizing and motivating the authors of the selected ideas was another objective of the operation.

JUAN ANTÓNIO DELATTE COMMUNICATION COMPETENCE CENTRE AND IBERIA

Xavier Catalan, the Managing Director of Benvic called me into his office. “Juan”, he said to me, “I’m convinced that unless we stake everything on innovation, our future is limited. I would like you to help us stimulate innovation at Benvic”. We set to work. He had clear ideas, and I was enthusiastic at the idea, and his employees were committed and motivated. The outcome is that Benvic has filed a patent application for a “colorimeter” with unique features. And there is more in the pipeline.

PIERRE DEWITTE SBU SPECIALTY POLYMERS

How do we arouse, encourage, amplify everyone’s creativity to innovate? Certain examples fascinated me. Luc De Brabandere showed us an analogy-based method. In his Innovation Café, Tom Balsano at SAP challenged us with other people’s ideas. Anne Goldberg used TRIZ (Theory of Inventive Problem Solving) at Marietta. In every case “inventive thinking is inevitably dissident thinking, opening us up to ourselves and the outside world”.

EILEEN DIAKUN SBU DETERGENTS

One of my SBU customers defined Innovation as the ‘transfer of knowledge into money’. It is also ‘matching what’s needed with what’s possible’. Hence the significant challenge of innovation in an industrial context and in particular in chemistry. Finding the perfect answer to a particular problem is perhaps less important in itself than persevering and networking to get there.

ERN EDMONDS SBU MOLECULAR SOLUTIONS

Just arriving in Molecular Solutions, I was immediately overwhelmed by the ingenuity and energy of the scientists and engineers I encountered - often well beyond the cutting edge of new science invention, into the realms of exploration. The Innovation Trophy has been a golden opportunity for the new teams to convert ideas into innovation. As a humble physicist my role has been to play professional simpleton: “if it can be explained to me, anyone can understand it.”

EDVAM FONSECA BRAZIL & ARGENTINA

We created a seminar for our employees, bringing together the Values and Innovation around the message: Innovation is a result of Teamwork. We took elements from the “Living Values” seminar, adding information on the Solvay Innovation process and some creativity techniques from Professor Edward De Bono. Taken by groups of 20 people a time in 2004 and 2005, this seminar was evaluated really well by all attendants. →

“The Trophy points to the importance of thinking today how we are going to perform tomorrow.”

>>> Champions (IC) network. This has allowed them to gain visibility in their role, to develop specific initiatives and to offer advice to their teams whenever needed.

The selection criteria differ from 2003. This time they are six in number: contributing to growth, contributing to competitiveness, creating value for our customers, acting for sustainable development, developing new and original projects and innovating in partnerships. These criteria express our desire to embed the Trophy in the Group's wider thrust for growth and competitiveness. With its main theme “A better future. What do you see that we don't?” the Trophy points to the importance of thinking today how we are going to perform tomorrow. “*We must manage the present as a consequence of the future*”, the Chairmen of the Executive Committee and of the Board of Directors wrote in our 2005 Annual Report. It is today's innovations that will pave the way to tomorrow's successes.

And next... The winning projects will be chosen by an international jury of outside personalities and internal members (including representatives of the Sectors, Regions and

Competence Centres). This jury will select a winning team in each category and award the special partnership prize. The official prize-giving ceremony will take place in Brussels at the closing ceremony of the Innovation days planned for the December 19 and 20.

In conclusion, well beyond the context of the competition or festive event, the Trophy proclaims loud and clear the importance of creating value, the need for everyone to contribute, the role and importance of active management involvement, and the link between strategic thinking and teamwork results ●

BE OUR GUEST
FOR THE
INNOVATION
DAYS. TAKE
PART IN OUR

QUIZ

You know everything about the deployment of Innovation at Solvay ... or you will after reading this issue of Solvay live. Follow the clues and find the answers to the 10 questions. Surf to www.innovation.solvay.com⁽¹⁾ from August 16 to September 22 to take part in the Quiz. The 10 winners will be invited⁽²⁾ to the Innovation days on December 19 and 20 in Brussels. Now that's worth spending 10 minutes testing your knowledge on!

Happy searching and good luck.

⁽¹⁾ A specific address will be available for Pipelife and Inergy Automotive.

⁽²⁾ Travel and hotel costs paid.

→ PAUL HARDING

NAFTA

In January 2006 we hosted Brigitte for an innovation showcase at Alpharetta and Houston, at which people reviewed projects on which they were working and intended to submit to the Innovation Trophy competition. The typical comment made by participants was: “I had no idea we had so many interesting and innovative projects in our organization”. The lesson here is that encouraging innovation at Solvay may be as simple as just taking the time to publicize it.

HIELKE HOEKSTRA PIPELIFE

I was amazed to see how proud the entities are of their projects... The fact of filling in the detailed project forms made them much more visible and understandable to me. It also highlighted the fact that innovation is relative. What is very innovative for some people is not necessarily for others.

YVES HONTOIR

APPLIED TECHNOLOGIES ANALYSIS

Our entity covers in- and on-line industrial analysers, bridging two worlds, that of Process Instrumentation and Control and that of Laboratory Analytic Technologies. Coming from the former background, I enjoyed getting to know better the lab people and their techniques. More synergies are already on the way.

SANDER VAN HULSENBECK PHARMACEUTICALS SECTOR AND THE NETHERLANDS

The SIT 2003 celebrations were an unforgettable moment of great pride and of a sense of working together: the captivating presentations in the afternoon, the films shown, some of which, including my own, drew audience applause, and the evening show. In brief, a Solvay Innovation Trophy is the occasion for us to gain visibility and possibly fame!

HORST KROEGER

SBU FLUOR

It's very invigorating to see how many allies our SBU has in other Business Units:

- Plastics has entered a project that involves a fluorinated product, SIFREN®;
- SBU Molecular Solutions has submitted a project under our name which spotlights a multipurpose production concept from the Bad Wimpfen plant;
- a project from the Central Laboratory describing how to analyse and characterize high purity hydrofluoric acid. Fluorine is decidedly the most attractive and reactive atom in the entire periodic table.

MARC LACROIX

SBU ADVANCED FUNCTIONAL MINERALS

Acting as an Innovation Champion is not just a matter of promoting or supporting innovation and replication within the Group. Very soon I found myself facing a new challenge: how can we go and find sources of innovation from beyond the Group boundaries? The reply that a group of colleagues and I found was the

“Innocentive@ Solvay” program.

Can you imagine that Solvay's R&D today has the power of over 80 000 researchers? And that you pay only for the successes!

ALEXIS MARCHAND

FINANCE

If you ask for my personal assessment of the Innovation Trophy initiative, I would say that the Innovation Trophy is a formidable opportunity for all of us to get the message that we are all innovative (at times without being aware of it) and to have our work recognized by the outside world.

GISÈLE MARÉCHAL

SBU SODA ASH

The Innovation Champion is the lubricant – but the engine driving Innovation is the SBU Top Management team. My satisfactions as Innovation Champion? To feel the energy and to see good ideas successfully deployed on the ground. It's also seeing Innovation approaches from different parts of the SBU rewarded internally or externally.