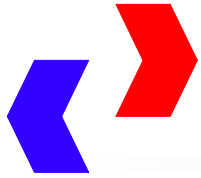


*Australian French Association for
Science and Technology Inc.*

Bastille Day French Festival

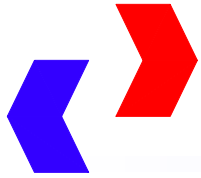
Sunday 17th July 2016

12:00 PM



Agenda: Two Speakers

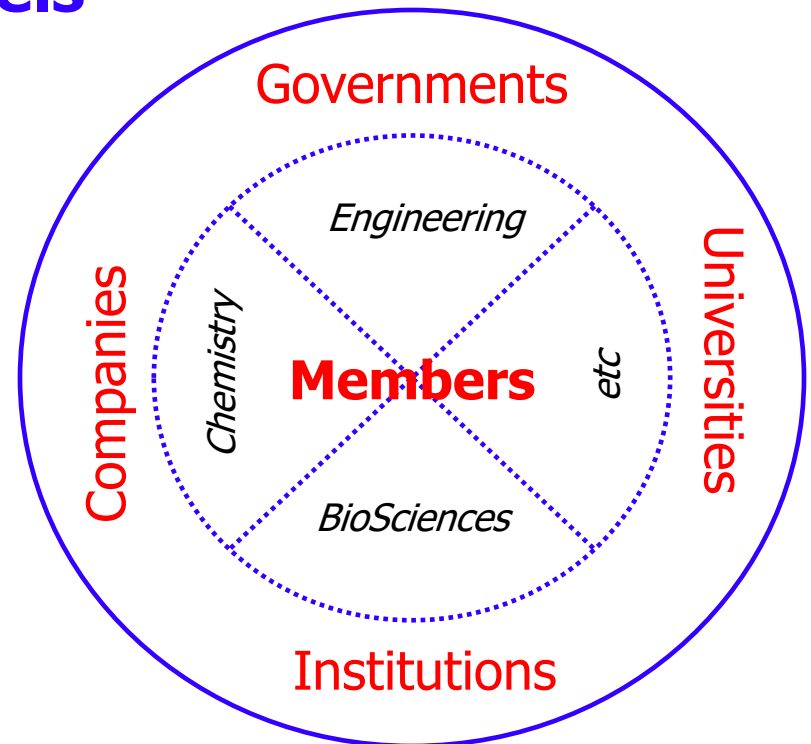
- Peter Tolé: AFAS President
 - Introduction to AFAS: Mission
 - Brief History: in Melbourne since 1979
 - Fellowship Recipients: some recent examples
 - Calendar of Events 2016: open to members
- Dr Adrian Orifici, RMIT University & AFAS Fellow
 - Associate Professor in the School of Engineering, teaching in aerospace structures and design
 - Presentation Topic: Aircraft Inspired by Nature
 - Research looks at advanced materials in aircraft and defence using advanced high strength lightweight plastics known as composites

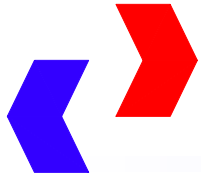


Mission

To develop and foster relationships between Australia and France in all fields of science and technology and at all levels

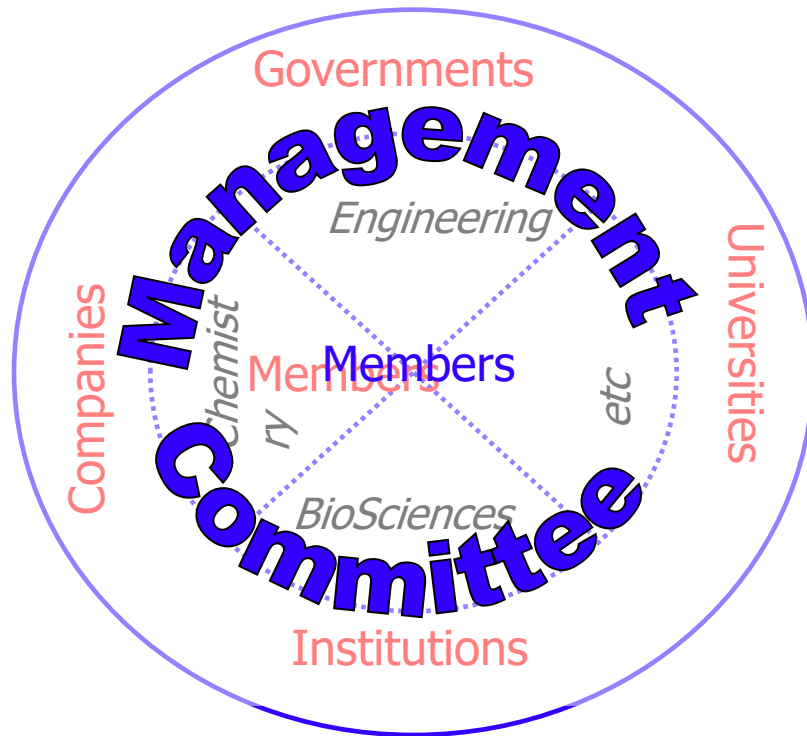
- Government**
- Institutions**
- Academics**
- Business**
- Individuals**





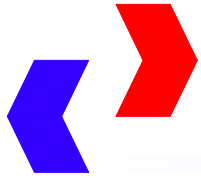
History and Organization

Since 1965 in Sydney and 1979 in Melbourne ... a growing network of Australians who undertook study tours to France from industry, academia and various institutions



Non-profit, Victorian-based,
volunteer association

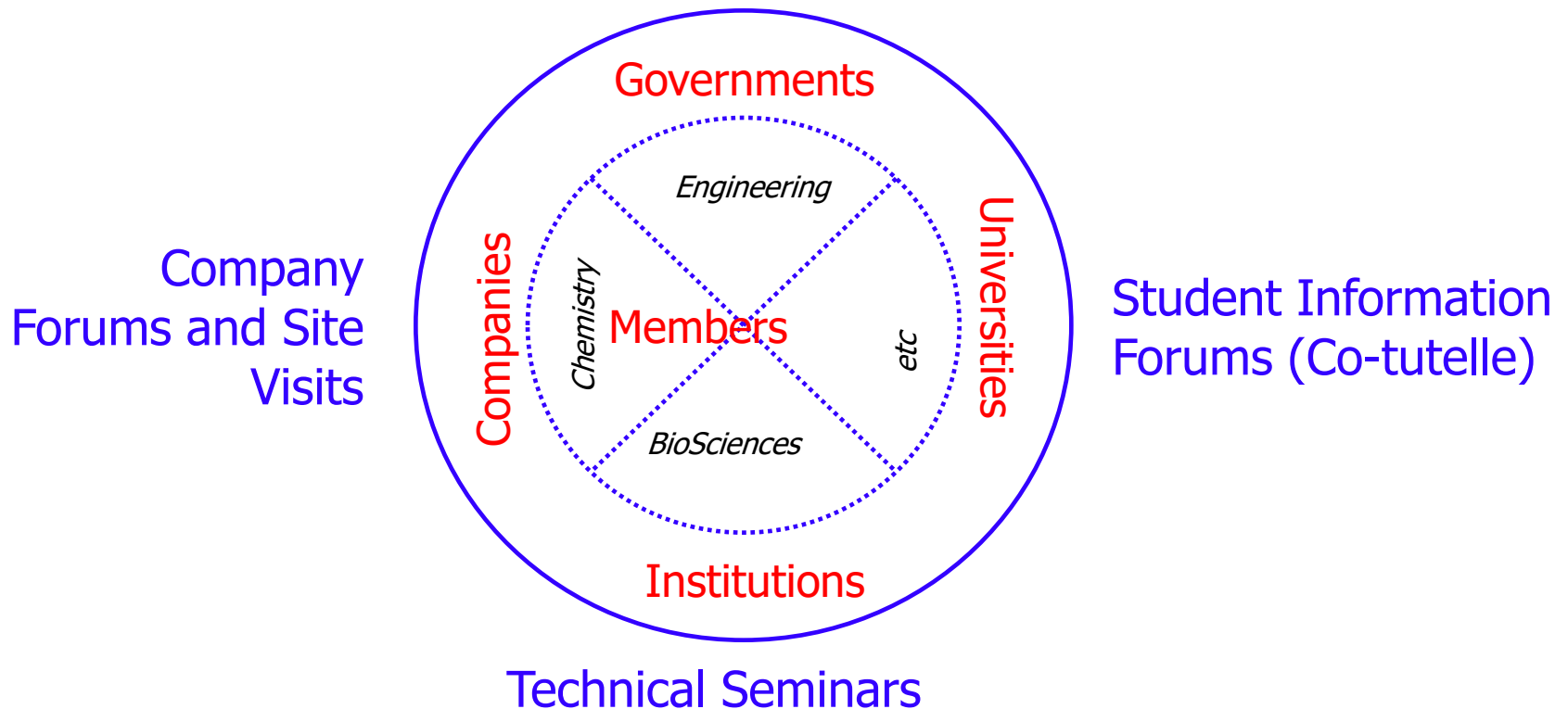
Committee represents Industry &
Academia

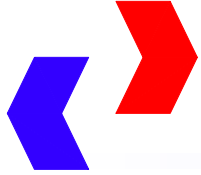


Activities

Conceived and organised in collaboration and with the support of AFAS stakeholders

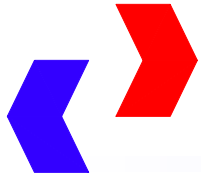
AFAS Victoria Fellowships





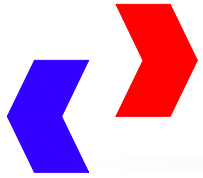
Brief History

- Australian French Association of Technical & Professional Specialists
- Australian engineers who had been to France on an ASTEF “stage”
- Started in Sydney in 1965
- Branch started in Melbourne in 1979



Highlights

- March 1979: First get together of “anciens stagiaires” at Alliance Française, Armadale
- March 1980: First AGM
- 1979, 1989, 1999: 10, 20 & 30 year celebrations held
- March 2000: Incorporation of AFAS as a non-profit, non-trading organisation under Victorian Association Incorporation Act 1981
- May 2003: Inaugural meeting of Victorian chapter of FEAST-France, University of Melbourne
- December 2004: First Presentation of AFAS FEAST-France Fellowships to 3 Victoria Fellows (Micah Atkin, Ric Barber, Serryn Eagleson)

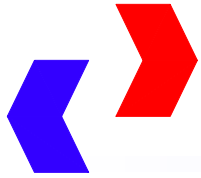


5th anniversary AFAS Fellowships

August 2008

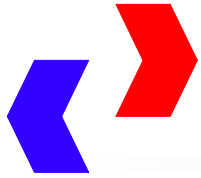


Pictured (L to R) – Susan Patrick, John Acton, Micah Atkin, Wendy Williams, Peter Tolé, Adriana Orifici, Adrian Orifici



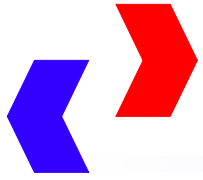
Highlights

- September 2008: Seminar – “New Frontiers for Water”
- 2009: Last year of support from French Embassy with fellowship funding
- Ongoing commitment and collaboration with Victorian Government with AFAS fellowships
- 2016: 13th year of presenting AFAS Vic awards to Australian post-doctoral researchers to encourage collaborative research with French research institutes and laboratories

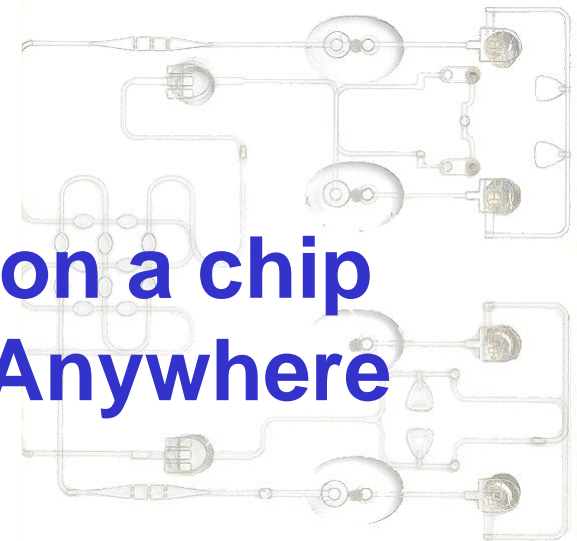
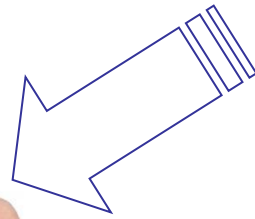
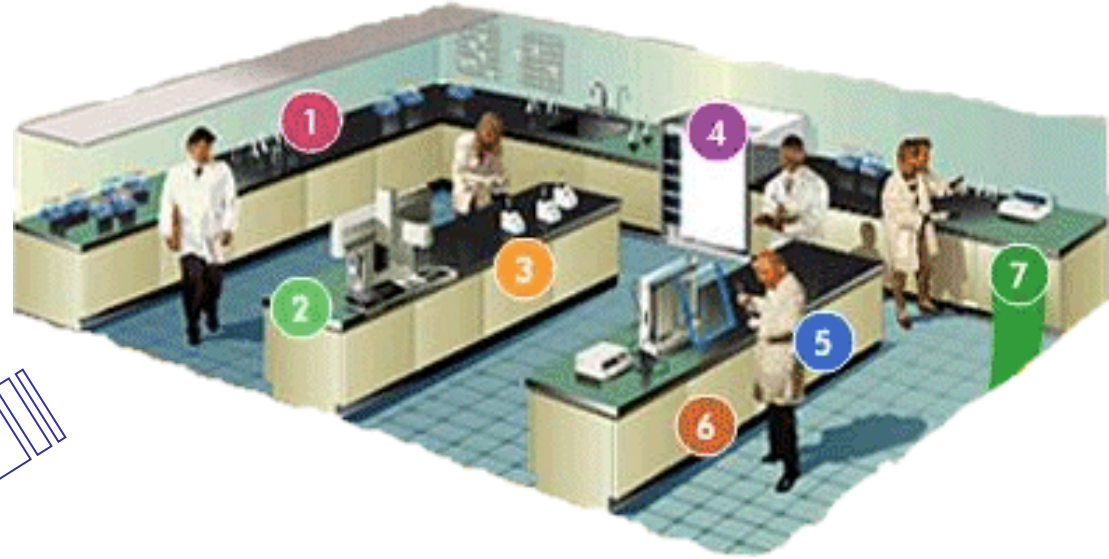


Highlights

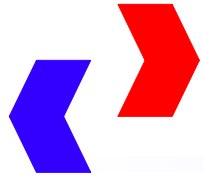
- Numerous talks, seminars & plant visits over the years
 - Renault Australia assembly plant
 - High Speed Rail Transport
 - French Videotex System
 - Formula One – Renault Sport
 - Wine & Vine Technologies
 - Smart security solutions
 - Smart Home
 - Sustainable Electricity Future
 - Public Transport in the 21st Century
 - Bostik, Synchrotron & Desalination plant visits
 - fellowship presentations on material technologies and biotechnology research ... and many more!!!



1st Fellow: Micah Atkin 2004

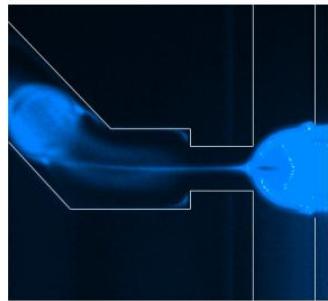


Laboratory on a chip
Any Assay Anywhere



Academic Research

■ Microfluidics, MEMS, and Nanostructures ESPCI



Dr P. Tabeling

Fundamental micro-fluid flow

- Mixing
- Bubble formation

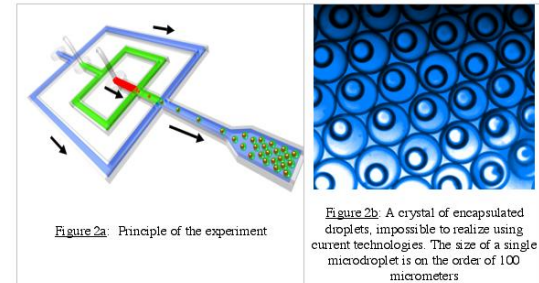


Figure 2a: Principle of the experiment

Figure 2b: A crystal of encapsulated droplets, impossible to realize using current technologies. The size of a single microdroplet is on the order of 100 micrometers

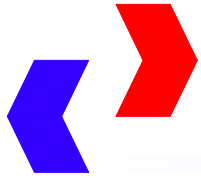
■ Leti – CEA (Paris, Grenoble)



Centre for innovation and expertise in micro and nanotechnology

- Secure Components for identification
- Embedded Energy for smart cards
- Card user interface components





Fellow: Jacqueline Flynn

- Determining how HIV spreads between immune cells
- Over 35 million people are infected with human immunodeficiency virus (HIV) world-wide.
- HIV rapidly spreads throughout the body infecting cells of our immune system.

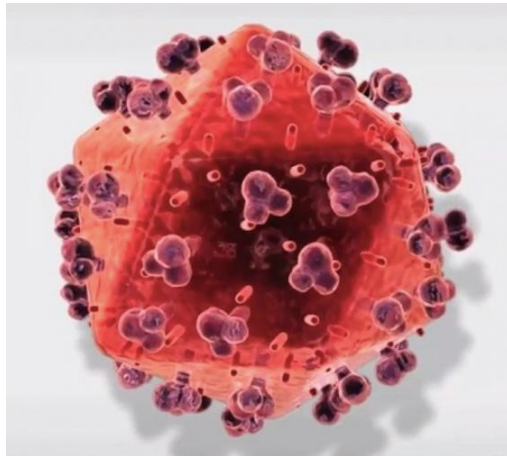
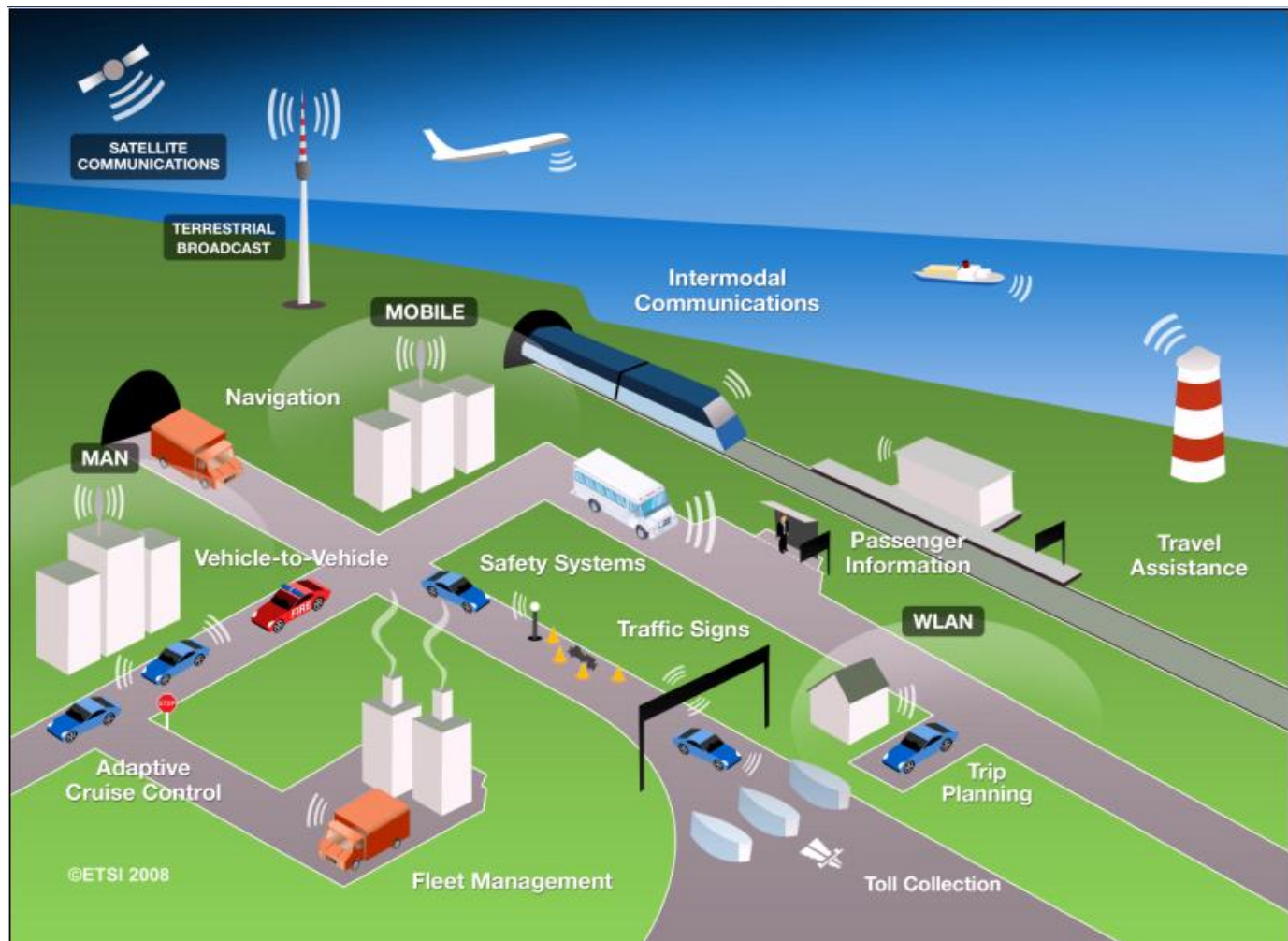
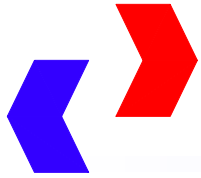


Diagram of HIV depicting the viral envelope spikes used to enter cells of our immune system.

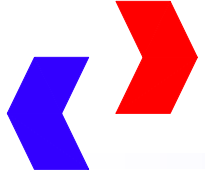
Fellow: Hai Vu on ITS





AFAS Forthcoming Events

- Materials Australia and AFAS Joint Event on 28 July.
- Michelin visit in August, 26 August 2016 (TBC)
- Annual Dinner, Bergerac, 16 September (TBC)
- ITS seminar on 10 October 2016 (FACCI joint event)
- Fellowship presentation in October
- Swinburne Factory of the future visit in November
- Visit to CSIRO 3D printing facility in December (TBC)



Presentation: Dr A Orifici

Aircraft Inspired by Nature