

Importance & Scope of cheminformatics:

Cheminformatics is the use of computer and informational techniques applied to a range of problems in the field of chemistry. These information techniques to transform data into information and information into knowledge for the intended purpose of making better decisions faster in the area of drug lead identification and optimization. [Cheminformatics](#) combines the scientific working fields of chemistry, computer science and information science in the areas of topology, chemical graph theory, information retrieval and data mining in the chemical space. The primary application of cheminformatics is in the storage, indexing and search of information relating to compounds.

Cheminformatics is a discipline organizing and coordinating the application of computers in chemistry. The conference will provide an international forum for discussing the latest developments in the field of cheminformatics, Bioinformatics and related fields. These events aim to create a platform for participants to gain hands-on experience, and an opportunity to ask questions and discuss problems with experts in the respective fields. Cheminformatics covers complementary disciplines that hold great promise for the advancement of research and development in biological systems, software development, techniques, [drug design](#), and so on.

Bioinformatics has recently emerged as a discipline straddling the established fields of biology and computer science. It is integral to modern biological research, and as a specialist pursuit. The conference will provide an international forum for discussing the latest developments in the field of Proteomics, [Bioinformatics](#) and related fields. These events aim to create a platform for participants to gain hands-on experience, and an opportunity to ask questions and discuss problems with experts in the respective fields. Proteomics and Bioinformatics covers complementary disciplines that hold great promise for the advancement of research and development in biological systems, software development, techniques, drug design, and so on.

Why Brisbane?

Brisbane is the most populous city Australia. Brisbane's metropolitan area has a population of 2.3 million and the South East Queensland urban conurbation, centred on Brisbane, encompasses a population of more than 3 million. Brisbane has seen consistent economic growth in recent years as a result of the resources boom. Major cultural events in Brisbane include the Ekka (the Royal Queensland Exhibition), held each August, and the Riverfestival, held each September at South Bank Parklands and surrounding areas.

The Australian industry is in a testing period as it adjusts to the challenges of the new global era in Cheminformatics. Also the central role of the chemistry in the economic and social fabric of most advanced economies has been demonstrated over the past few years. The share of foreign companies in the Top 1000 (IBIS Business Information) revenue doubled from 13 per cent to 24 per cent (to return the levels of 1980) - a shift not reflected in multinational investment in Australia's manufacturing sector. In the chemical industry it is estimated that foreign ownership exceeds 70 per cent - higher for some sectors such as soaps and detergents at 90 per cent.

Conference Highlights:

Fundamentals of cheminformatics

Cheminformatics and its applications

Cheminformatic tools for drug discovery

Characterisation of biologically active compounds

Quantitative structure activity relationship

Statistics for cheminformatics

Bioinformatics

Sequence analysis of bioinformatics

Glance of system chemistry

WHY TO ATTEND?

Cheminformatics 2016 could be an exceptional event which will lay a platform for the interaction between experts around the world and aims to accelerate scientific discoveries and major milestones in the field of cheminformatics and bioinformatics, creating the conference an ideal platform to share expertise, foster collaborations across trade and world, and assess rising technologies across the world. World-renowned speakers, the most recent techniques and the updates in cheminformatic fields are exceptional features of this conference.

Major Cheminformatic Societies around the Globe:

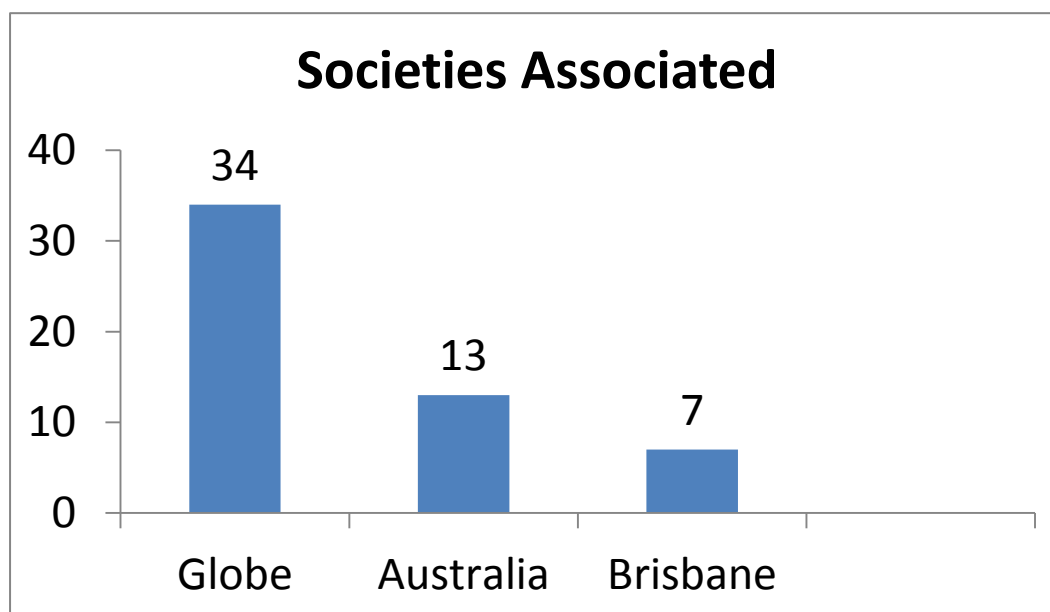
The Cheminformatics and QSAR Society

American Medical Informatics Association

American Chemical Society

Chemoinformatics Open Source Initiative (COSI)

Royal Society of Chemistry Chemical Information and Computer Applications Group.



Target audience:

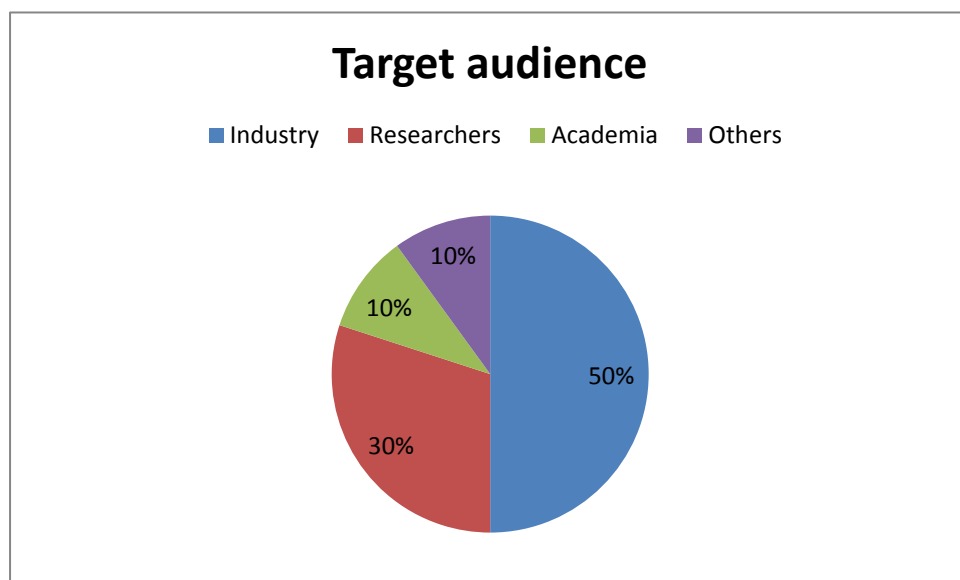
Departmental Managers, Deans, Vice Presidents, Professors from Cheminformatics. Cheminformatic technology providers, Cheminformatic equipment manufacturers and dealers, Cheminformatic laboratory service providers, Cheminformatic database and software providers, Biopharmaceutical (drug design and discovery) companies, Cheminformatics research companies and institutes, Cheminformatics associations.

Industry 50%

Researchers 30%

Academia 10%

Others 10%

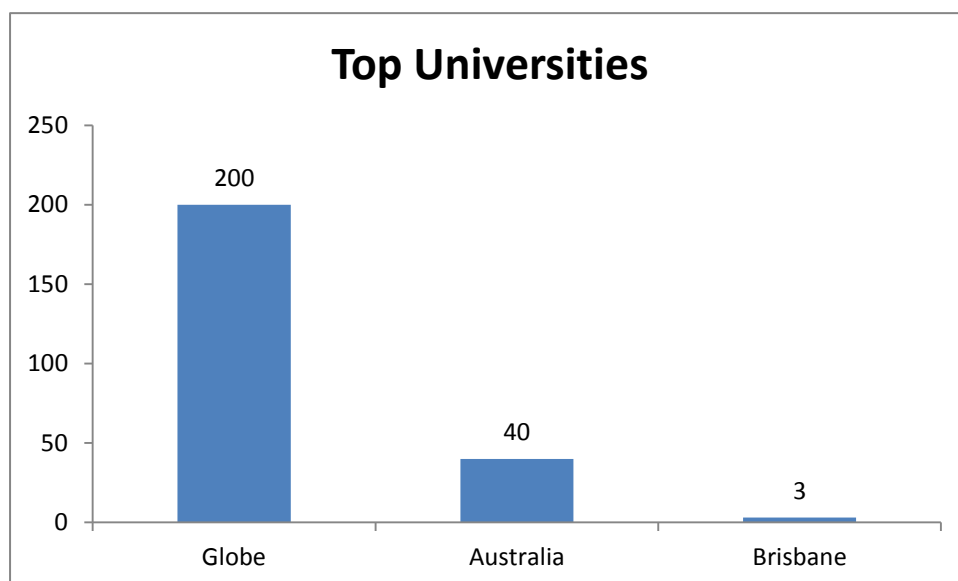


TOP UNIVERSITIES ASSOCIATED WITH CHEMINFORMATICS IN AUSTRALIA:

1. Australian Catholic University
2. Australian National University
3. Bond University
4. Carnegie Mellon University
5. Central Queensland

Top universities associated with cheminformatics in Brisbane:

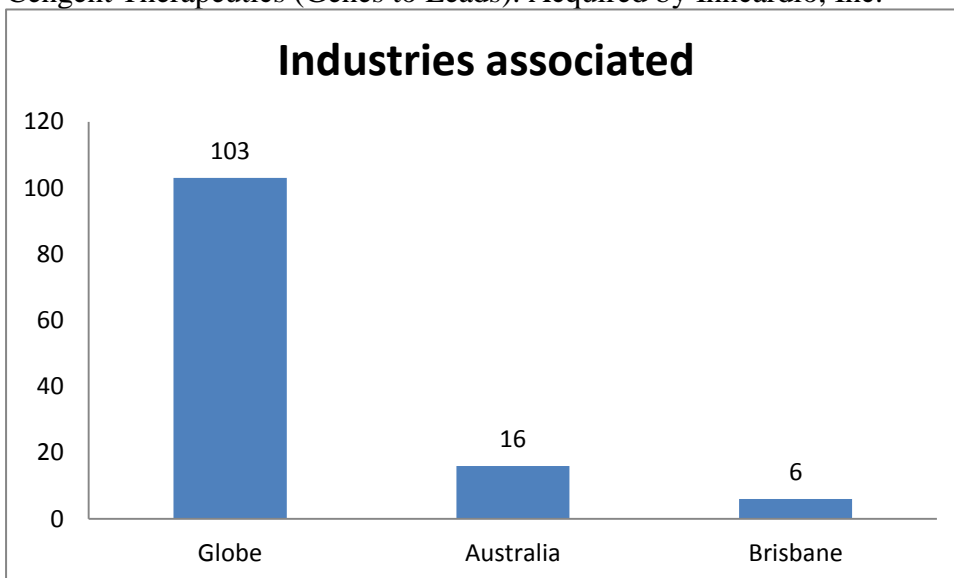
1. Queensland university of technology(QUT)
2. University of Queensland(UQ)
3. Griffith university(GRIFFITH)



INDUSTRIES ASSOCIATED WITH CHEMINFORMATICS :

- Accelrys
- ACD/Labs (Advanced Chemistry Development, Inc.)
- Afferent Systems Inc.
- Agilent Technologies
- AureusPharma
- Barnard Chemical Information Ltd. (John Barnard and Geoff Downs) SEE: digital chemistry
- Bio-Rad Laboratories
- BioReason
- BioSolveIT
- BlueObelisk.org

- BrukerDaltonics Inc.
- Cambridge Crystallographic Data Centre
- CambridgeSoft Corporation
- CARB Center for Advanced Research in Biotechnology (NIST/University of Maryland)
- Cengent Therapeutics (Genes to Leads). Acquired by Inncardio, Inc.



Market Value on Cheminformatic Research:

The research examines the world cheminformatics markets in terms of the challenges faced by market participants, drivers and restraints in the industry, the competitive structure in the major markets, the revenue forecasts and growth rates and strategic recommendations. Market size of cheminformatics is roughly \$300-400 million a year. A report done circa 2003 showed the market around 300 from around 2008-2010 at \$350 million. The global research and analysis industry is estimated to reach USD 17 billion by 2010, of which USD 12 billion(almost 70%) would be outsourced to India alone. The Indian biotech or chemical industry, which has been growing at the rate of 28.09% from the year 2005, is estimated to reach the \$5 billion mark by the end of 2010. The increasing application of genomics, proteomics, cheminformatics, transcriptomics, metabolomics, [molecular phylogenetics](#) etc. in biotech and pharmaceutical research and development has created a huge commercial market for bioinformatics worldwide. In their latest research study “Global Bioinformatics and cheminformatics market outlook 2019”, RNCOS’ analysts

identify how the global bioinformatics market reached the market of around US\$ 3.7 Billion in 2013 with the anticipation of its growth at a CAGR of around 19% during 2015-2019. The report is an outcome of an in-depth research and comprehensive analysis of global developments and opportunities listed in the section of the bioinformatics trends.

Market Growth of Cheminformatic Research in Last and Upcoming Ten Years:

Global Bioinformatics value market is projected to grow at 25.32% compounded annually from 2005 through 2015. North America is projected to occupy about 40% of the total global market. Genomics application is projected to be the application area during the analysis period."Bioinformatics Market - Global Industry Analysis, Size, Growth Trends, Share, Opportunities and Forecast". As per the study, the global Bioinformatics market was valued at \$3.4 billion in 2013, and it is expected to reach \$12.8 billion by 2020. The market is expected to grow at a CAGR of 21.2% during 2014-2020.

The global bioinformatics market is estimated to reach \$4.2 billion by the end in 2014 and is poised to reach \$13.3 billion by 2020 at a CAGR of 20.9% from 2015 to 2020. In 2015, North America is expected to account for the largest share of the bioinformatics market, followed by Europe. Both markets are estimated to register double-digit growth rates over the next five years. The Bioinformatics market has risen exponentially in recent years into an important segment of the biotechnology industry. The increasing application of genomics, proteomics, cheminformatics, transcriptomics, metabolomics, molecular phylogenetics etc.

In their latest research study "Global Bioinformatics Market Outlook 2019", RNCOS' analysts identify how the global bioinformatics market reached the mark of around US\$ 3.7 Billion in 2013 with the anticipation of its growth at a CAGR of around 19% during 2015-2019. Transparency Market Research has announced the addition of a market study based on the bioinformatics market. According to the report, the global bioinformatics market is estimated to reach US\$30.8 billion by 2020. The study states that the bioinformatics market will

develop at a robust CAGR of 15.5% from 2014 to 2020. According to the report, the bioinformatics market had reached a value of US\$10.0 billion in 2013. According to a new market report published by Persistence Market

Research “Global Market Study on Bioinformatics - Asia to Witness Fastest Growth by 2020,” the global bioinformatics market was valued at USD 4,110.6 million in 2014 and is expected to grow at a CAGR of 20.4% from 2014 to 2020, to reach an estimated value of USD 12,542.4 million in 2020.

