Sustainable Industrial Processing Summit & Exhibition



CURRICULUM VITAE

Professor Dr.techn. HARALD A. ØYE

Born: Oslo, February 1, 1935.

Education:

- M.Sc.Eng. (Siv.ing.), The Norwegian Institute of Technology, Department of Chemistry, 1958. M.Sc. degree conferred with Magna cum Laude with report to His Majesty the King Olav V.
- Doctor of Technology, The Norwegian Institute of Technology, 1964.

Positions:

- Industrial worker Christiania Spigerverk 1953-1954.
- Research fellow, Institute of Inorganic Chemistry, The Norwegian Institute of Technology, 1958-1962.
- Post-doctorate fellow, Chem. Div., Argonne National Laboratory, IL, USA, 1963-1964.
- Associate professor, Institute of Inorganic Chemistry, The Norwegian Institute of Technology, 1965-1972.
- Professor at Institute of Inorganic Chemistry, The Norwegian Institute of Technology, 1973-1998. Institute Director 1973 1990 and 1993 1998.
- After merger Professor at Institute of Chemistry, later Department of Materials Science and Engineering, Norwegian University of Science and Technology, 1999-2005.
- Emeritus Professor 2005 -.
- Elected President of the Norwegian Academy of Technological Sciences, 1985-1992.
- Board member Council of Academies of Engineering and Technological Sciences (CAETS) 1990-1992.
- ISO/TC 47/SC7 Later ISO/TC 226, Materials for the Production of Primary Aluminium, Member 1991 2002, 2012 -. Chairman 2003 2011.
- Head of Strong Point Centre at The Norwegian Institute of Technology in Light Metals Technology 1992-1996, 1997 2001.

Honors:

- Knighted by King Harald V for Technological Research in 1999. (Knight First Class of the Royal Norwegian Order of St. Olav).
- Honorary Fellow of The Norwegian Academy of Technological Sciences 1993.
- Honorary professor of North-Eastern University, Shenyang, China, 1996.
- The Research Council of Norway's 1997 Prize for Outstanding Research: Pioneering work in aluminium process research.

- The Norwegian Chemical Society Guldberg-Waage Medal, 1998.
- The Electrochemical Society (USA) Max Bredig Award for Molten Salt Research, 1998.
- The Gunnerus Medal from The Royal Norwegian Society of Science and Letters, 2004.
- Sam Eide Foundation Honorary Price, 2005.
- TMS Light Metals Technology Award, 2008.
- Elkem Research Foundation Honorary Research Prize, 2014.

Fellow of

Norwegian Academy of Technological Sciences

The Royal Norwegian Society of Sciences and Letters.

Norwegian Academy of Science and Letters.

The Academy of Technological Science of Russia.

La Academia Nacional de Ingeniera, Mexico.

The Finnish Academy of Technology.

Sächsische Akademie der Wissenschaften zu Leipzig.

US National Research Council Senior Scientist Award, 1979-1981, 1986-1987

Temporary International Assignments:

- Guest scientist at Chem. Div., Argonne National Laboratory, Argonne, IL, May-Aug. 1967 and Aug.-Sept. 1977.
- Visiting professor Technical University of Denmark, Copenhagen, Denmark, October 1978, January 1979 and Sept Dec. 2002.
- Guest scientist at Technische Universität Clausthal, Lehrstuhl für Spezielle Anorganische Chemie, Germany, Aug. 1970 Aug. 1971.
- Guest scientist at Institute. de Chimica Analitica, University de Bari, Italy, May July 1975.
- Distinguished visiting professor at F.J. Seiler Research Laboratory, US Air Force Academy, Colorado, USA, Nov. 1979 Jan. 1981, and Sept. 1, 1986 Sept. 5, 1987.
- Brotherton distinguished visiting professor at The University of Leeds, Oct, 1985.
- Visiting professor Center for Applied Energy Research, University of Lexington, KY, USA, Jan. - April 1994.
- Visiting professor R and D Carbon, Sierre, Switzerland, April May 1994.
- Visiting professor Institut des Systémes Thermiques Industriels, University of Marseilles, France, July 1994.
- Visiting professor University of Auckland, Auckland, New Zealand, Oct. 1995.
- Visiting scientist MOLTECH, Geneve, Switzerland, Nov.- Dec. 1995

Research Fields:

- Applied research on electro winning of aluminium and magnesium and production and refining of silicon. Materials science. Carbon technology.
- Transport properties of hydrocarbon systems. Thermodynamic, transport properties and spectroscopy of molten salts and high temperature systems.

Publications and Teaching:

• More than 400 international publications. See separate list. Educated 38 Ph.D. candidates and numerous M.Sc. candidates. Main teaching subjects: General Chemistry, Advanced Inorganic Chemistry, Group Theory, Production of Aluminium, Magnesium and Silicon.

International activities:

- Initiator, director and lecturer of the yearly "International Course on Process Metallurgy of Aluminium" at the Norwegian University of Science and Technology, 1982 2015, (3000 participants from 51 countries last 32 years).
- Chairman of the semi-annual international conference: Silicon for the Chemical and Solar Industry, 1992 2012 in different locations in Norway. (Totally about 1700 participants from 34 countries).

Other recent international aluminium courses or lectures

Cathode Technology in Hall-Heroult Electrolysis: TMS, USA: San Francisco 1994, Anaheim 1996, San Diego 1998

1988: Inalum, Sumatra, Indonesia - Comalco, Thomastown, Australia; - Boyne Aluminium, Gladstone, Australia

1989 Alumax, Bellingham, US - Hydro Aluminium Høyanger - New Zealand Smelter, Invercargil – Inalum Sumatra, Indonesia

1990: Alumax, Mount Holly, US - Alumax, Frederich, US - Pechiney St. Jean de Maurienne, France

1991: Hydro Aluminium, Sunndal – ARCO, Anaheim, US

1992: Egyptalum, Nag Hammady – Krasnoyarsk Aluminium, Russia – Sayansk Aluminium, Russia – Comalco, Thomastown, Australia – Hindalco, Renukoot, India 1994: National Southwire Aluminium, Hawesville, US

1995: Alumax, Deschambault, Canada – 3rd Moltech Seminar, Dusseldorf, Germany – Krasnoyarsk Aluminium, Russia – University of Melbourne, Australia - Comalco, Thomastown, Australia

1996: Jawaharlal Nehru Aluminium Research, Nagpur, India – Venalum, Puerto Ordaz(twice), Venezuela – Central South University, Changsha, China – North East University, Shenyang, China – 4th Moltech Seminar, Pisa, Italy

1997: DUBAL, Dubai, — Alumax, Bellingham(twice), US — ARCO, Los Angeles, US 1998: University of Pretoria, South Africa — Alusaf, Richards Bay, South Africa — Hydro Aluminium, Karmøy — Krasnoyarsk Aluminium, Russia — TALUM, Kidrievo, Slovenia

1999: Alumiinio y Derivados de Veracruz, Mexico – ARABAL 99, Kuwait

2001: Aluminio y Derivados, Veracruz, Mexico – University of Toronto, Canada – Pingguo Aluminium, China

2002: Aluminium of Siberia, Russia – Sayansk Aluminium, Russia –

2003: ALCOA, Pocos de Caldas, Brazil – Bayside Aluminium, Richards Bay, South Africa – SMV, Skånevik

2004: Bayside Aluminium, Richards Bay, South Africa – ALCOA, Pocos de Caldas, Brazil

2005: University of Sherbrooke, Canada – University of Laval, Canada – ALCAN Conference Centre, Canada – Siberia Aluminium Conference, Russia – Inst. High Temperature Electrochemistry, Yekaterinburg, Russia – International Aluminium Seminar, Beijing, China

2006: ARABAL 2006, Sharm El Sheik, Egypt – Egyptalum, Nag Hammady – RUSAL Sajanagorsk and Krasnoyarsk, Russia– CIM 2006 Quebec City, Canada

2007: RUSAl Sajanagorsk and Krasnoyarsk, Russia – Guizhou Aluminium, Guiyang, China - China International Conference on Aluminium, Beijing – University of

Science and Technoloy, Beijing, China

2008: Iranian Smelter Course Almady Aluminium, Bandar-Abbas

2009: VII International Conference on Molten Slags, Fluxes and Salts, Santiago, Chile – Iran University of Science and Technology, Teheran – Non-Ferrous Metals of Siberia, Krasnoyarsk, Russia

2010: Non-Ferrous Metals of Siberia, Krasnoyarsk, Russia - Innovation and Management in Aluminium Technology, Trondheim

2011: 3rd Siberian Non Ferrous Conference, Russia – RUSAL ,Khakas Aluminium, Sayanogorsk, Russia

2012: CPI Ningxia Energy Aluminium Qingxin Carbon Co., Qingtongxia, China - Zhejiang Huadong Aluminium Co, Lanxi Zhejiang- China - Northeastern University, School of Materials and Metallurgy, Shenyang, China - University of Science and Technology, Beijing, China - 27th International Aluminium Conference, Metall Bulletin Events, Moscow, Russia - Ural Scientific Forum, Yekaterinburg, Russia - EMAL, Abu Dhabi

2014. DUBAL, Dubai

2015. VII International Congress and Exhibition on Non-Ferrous Metals and Minerals, Krasnoyarsk. Russia – Sustainable Industrial Processing Summit and Exhibition, Antalya, Turkey

Refining of Silicon:

Camargo Correa Metais, Tucurui, Brazil, 1996; Chonbuk National University, Jeonju, Korea 2009

- Regularly invited to present lectures of Metallurgical Society of AIME (TMS) meetings (last 38 years), Gordon Conference on Molten Salts, Euchem Conference on Molten Salts, Electrochemical Society Meeting, Journées d'Etude sur les Sels Fondue. Give usually 10 to 20 international lectures at Universities, conferences or aluminium smelters per year
- Appointed by The Royal Norwegian Ministerium of Foreign Affairs as specialist to Germany, Romania, Yugoslavia, Poland and Czechoslovakia for presenting lectures and discussion of research activities.
- Head of ISO/TC 47/(SC7 (Materials for the aluminium industry) and member of former IUPAC subcommittee on Transport Properties, now International Association for Transport Properties
- Regular visitor and consultant to aluminium plants all over the world.

Evaluation work:

- International committee to evaluate inorganic chemistry and material science research in Sweden.
- The Royal Norwegian Council for Scientific and Industrial Research committee on process technology.
- External examiner University of Dar es Salam.
- Evaluation of promotion of professors at M.I.T. and University of Mississippi.
- Norwegian national committee to evaluate promotion of professors in chemistry.
- National High Technology Research and Development Program, China