

Albertsson-ICBP
Self-Introduction of Plenary Speaker for ICBP 2017



Ann-Christine Albertsson
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Prof. Ann-Christine Albertsson is currently active at the Department of Fibre and Polymer Technology, Royal Institute of Technology (KTH). Since the start in the spring of 2000, she is also the Editor-in-Chief of the American Chemical Society journal “Biomacromolecules”, a journal integrating polymer science and the biological sciences. Professor Albertsson is the author or co-author of nearly 400 publications in international scientific journals and is also the editor of 7 books.

Research interests: Ring-opening polymerization, functional polymers and surface treatment for increased biocompatibility, controlled degradation, degradation rate, degradation products and degradation mechanisms as well as control over environmental interaction of polymers. Applied research include well-organized materials and tailor-made polymers for medical applications, drugs and agriculture, advanced systems for polymers, hierarchical structures and hybrid materials, recycling, waste problems and life-cycle design, problems adapted to the environment, materials from renewable resources and especially modified hemicellulose as barrier films and hydrogels.

Professor Ann-Christine Albertsson is Honorary Professor at BUCT University of Chemical Technology in Beijing, China (2009) and also Distinguished Guest Professor at the Changchun Institute of Applied Chemistry, Chinese Academy of Sciences since 2006.

Presentation title: Sustainable material and its interaction with the environment

CV of Plenary Speaker for ICBP 2017

Ann-Christine Albertsson

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Doctoral Degree

1977: Ph.D. in Polymer Technology, Royal Institute of Technology. Dissertation on “Studies on the Mineralization of C¹⁴-Labelled Polyethylenes in Aerobic Biodegradation and Aqueous Aging” Supervisor: Professor Bengt Rånby

Postdoctoral Visits

Distinguished Guest Professor: The Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, since 2006.

Visiting Professor: Polytechnic University of New York, Brooklyn, N.Y., USA: Spring 1984

Visiting Scientist: University of Kyoto, Japan: January-February 1975; University of Massachusetts, Amherst, USA: Autumn 1982 – Spring 1983; Research Institute for Polymers and Textiles, Tsukuba, Japan: January-March 1986 (invited by MITI)

Senior Lecturer Expertise

1980 Docent in Polymer technology

1980 University lecturer, Department of Polymer Technology, Royal Institute of Technology

Employments

1986-1989 Acting Professor, Department of Polymer Technology, Royal Institute of Technology; 1986-2005 Head, Department of Fibre and Polymer Technology, Royal Institute of Technology; 1989- Professor, Department of Polymer Technology, Royal Institute of Technology, appointed by Government; 2013- Prof em., Senior researcher.

Awards and Special Commissions

1992 The Arnberg Award: The Royal Swedish Academy of Sciences; 1996 The Nordblad.-Ekstrand Medal: The Swedish Chemical Society; 2009 Honorary Professor at

BUCT, Beijing University of Chemical Technology; 2009 Honorary Member of the Israel Chemical Society; 2009 The Giulio Natta Award for a senior scientist whose discoveries have contributed to an enhancement in the quality of life in the field of Chemistry: Giulio Natta e Nicolò Copernico” Awards foundation, Italy, 2009 ERC Advanced Grant (EU top scientist award), 2011 Stockholm Innovation Grant

Publications

About 400 publications in international scientific journals, and with over 12,000 citations (h-index 55). Editor of 10 books.

Patents

1. O. Dahlman; M. Söderqvist Lindblad; J. Parkås, A.-C. Albertsson; U. Edlund, Utilization of a wood hydrolysate, *WO 2009068525 A1*, 2009.
2. A.-C. Albertsson; U. Edlund, Barrier layers for packaging laminates and packaging laminates comprising such barrier layers, *WO 2011005181 A1*, 2011.
3. A.-C. Albertsson; U. Edlund, J. Voepel, Manufacture of renewable superabsorbents from biomass source, *WO 2012028565 A1*, 2012.

Professional Activities

1989- Member of the Royal Swedish Academy of Engineering Sciences (IVA); 1996- Member of the board of RIFO (The Swedish Association of Members of Parliament and Scientists); 1983-2000 Swedish Cement and Concrete Research Institute; 1992-1994 and 2003-2006 The Swedish Government Research Advisory Board of the Ministry of Education and Science; 1999-2004 Member of the board Defence Material Administration (FMV); 1999-2004 Member of the board Trelleborg AB; 1992-1997 Member of the board of KTH Alumni; 1995 Fellow IUPAC; 1994-1998 Chairman working party Functional Polymers; 1993-1996 Member of working party for Recycling of Polymers; 1995- Member of the Board of EPF (European Polymer Federation) and 2001-2003 President EPF; 1986- Chair person SSF (Swedish Polymer Society); 2005 and 2007 Participated in the panel evaluating applications in Material Science and 2013 participated in the panel Biomass Conversion applications for the Research Council for Natural Sciences and Engineering of the Academy of Finland; 2007 Member of the Scientific Advisory Board of the centre of Excellence, FUNMAT, Finland (Functional Materials); 2008-2012 Member of Scientific Advisory Board at the Max Planck Institute for Polymer Research; 2008 Member of Advisory board, Borealis; 2007-2013 Member of the Advisory Board of the Graduate School of Excellence ”Materials

Science in Mainz” at the Johannes Gutenberg University of Mainz; 2008 and 2010 Panel Member in the European Research Council (ERC) Advanced Grant Peer Review Evaluation as well as 2012, 2014 Panel Member in the ERC Starting Grant 2012; 2013 Appointed chairperson for the evaluation committee Material Science by the Swedish Research Council; 2013-2014 Chairperson for the Review Panel of the Helmholtz Programme “Biointerfaces in Technology and Medicine”, Germany.

Editor-in-Chief of Biomacromolecules

Since the start of the journal, in Spring 2000, Editor-in-Chief of the American Chemical Society Journal *Biomacromolecules*. A journal integrating polymer science and the biological sciences. Impact factor 2013: 5,788

Member of the editorial board of the following journals

Advances in Polymer Science, Progress in Polymer Science, Macromolecules (1999-2002), Journal of Macromolecular Science Part A – Pure and Applied Science (1985-1996), Macromolecular Reports (1991-1996), Journal of Applied Polymer Science, Journal of Polymer Science A: Polymer Chemistry, Polymer Degradation and Stability, Journal of Environmental Polymer Degradation, Journal of Bioactive and Compatible Polymers, Acta Polymerica, Polymers for Advanced Technologies (PAT), Polymers & Polymer Composites, Chinese Journal of Polymer Science, Journal of Biopharmaceutics and Biotechnology

Conferences

Chairperson and organizer of several international conferences at KTH (approx. 20). Member of the international advisory committee for more than 100 international conferences worldwide. Invited chairperson, opening lecturer, plenary speaker, invited lecturer and keynote speaker at many international conferences. Organizer of the thematic program “Chemistry of Natural Resources” at the American Chemical Society (ACS) Spring meeting in Anaheim, USA, 2011. Co-organizer of the session “Environmentally Benign Polymers” at IUPAC World Polymer Congress, MACRO 2014, Chiang Mai, Thailand, 2014.