



Doctor Honoris Causa title awarded to
Professor Joop Schoonman
from Delft Institute For Sustainable Energy -
Technical University Delft,
The Netherlands

The University Senate in its session of April 2006 decided unanimously to award the *Doctor Honoris Causa* title to **Prof.dr.eng. Joop Schoonman** from the Faculty of Applied Sciences of the Technical University of Delft for outstanding scientific results and important contributions in the fields of micro and nano ionics (batteries, fuel cells, solar cells and sensors), nanostructured materials, sustainable hydrogen, as well as for the support given to the Chemistry and Chemical Engineering Education in Constanta.

1. Introduction

The ceremony took place in the Aula Magna of the Ovidius University of Constanta, Romania on May 12, 2006 and it was a special event marked by the presence of distinguished guests, staff members of the Ovidius University of Constanta, Oil&Gas University of Ploiesti, University of Bucharest, Politehnica University of Bucharest, Technical University of Iasi, Transilvania University of Brasov, researchers, Ph.D and M.Sc. students from the same universities. The proposal for the Dr.h.c. award was initiated by the Department of Chemistry, Faculty of Physics, Chemistry and Petroleum Technology based on the existing cooperation programs with Professor Schoonman and the TU Delft.

Joop Schoonman was born on June 25th, 1943 in Utrecht, The Netherlands. After high school graduation, during 1961 - 1967, he attended the courses of the University of Utrecht; he received his chemistry bachelor degree in 1964 and then the Master Diploma in Solid State Chemistry in 1967. After university graduation, he worked as a Solid State Chemistry assistant professor, and in 1971 he got his "cum laude" chemistry Ph. D. with the thesis "Electrical Properties of Lead Bromide", under Professor J. H. van Santen guidance. During his 39 years of activity, he followed all university teaching

career's steps, and in 1984 he was promoted on the position of University Professor in Inorganic Chemistry at Delft Technical Chemistry, position that he still holds in the present.

During 1988 - 1990 he was head of the Inorganic Chemistry and Physics Chemistry Department at Delft Technical University, while in **1993 - 1997 he was Dean of the Chemical Technology and Materials Science Faculty**, from the university mentioned above. Moreover, in 2002 he was elected as scientific director at "Delft Institute of Sustainable Energy".

Based on its research and educational merits, during his university career, he has been invited at different universities and research institutes from abroad: in Denmark- visiting senior scientist at Risø National Laboratory (1983); in Romania - Honorary Professorship and Doctorate at "Transilvania" University of Brasov, starting 1996 until nowadays; in USA - visiting Professor at Massachusetts Institute of Technology, Cambridge, USA (1997) and Stanford University (2002); in Italy - Guest-Professor at European School of Advanced Studies in Materials Sciences, University of Pavia (from 2000 - present) and in Poland - Honorary Professorship - Technical University Warsaw, Poland (2006).

From 1984, professor Schoonman has been a PhD coordinator and under his guidance 34 Ph.D. students from TU Delft and 7 outside TU Delft graduated their PhD in Sciences.

Professor Schoonman is internationally recognized as a member of numerous professional societies in The Netherlands and world – wide: Royal Netherlands Chemical Society - Inorganic and Physical Chemistry Division, Netherlands Ceramic Society, Materials Research Society (USA), International Society for Solid State Ionics, Asian Society for Solid State Ionics (Honorary member), Holland Society of Arts and Sciences (Hollandsche Maatschappij der Wetenschappen) and "Bataafs Genootschap". Moreover, he develops a sustained activity within numerous professional organizations in The Netherlands and abroad.

Professor Joop Schoonman has been appointed in important international scientific committees and expert groups. As recognition of his important research contributions, he was invited to be a member of prestigious international peer-reviewed publications such as: Solid State Ionics: Diffusion and Reactions: Regional Editor Europe, Solid State Ionics: Diffusion and Reactions, European Journal of Solid State and Inorganic Chemistry, Journal of the European Ceramic Society, Journal of Nanoparticle Science, Solid State Sciences, Environmental Engineering and Management Journal, H₂ World, and also in the advisory editorial board of Nanotechnology Law & Business, and International Scientific Journal for Alternative Energy and Ecology.

Among the research directions that have been initiated or developed through Professor Schoonman's research can be mentioned:

- Defect Chemistry: relations between physical and chemical properties and defect structures of electroceramics;
- Solid State Electrochemistry;
- Micro - and Nano-Ionics: batteries, fuel cells, solar cells and sensors;
- Chemical Vapor Deposition, Physical Vapor Deposition and aerosol techniques for thin films and submicron powders;
- Nanostructured materials;
- Sustainable hydrogen: production, storage, characterization and utilization.

There are an impressive number of books, papers published in prestigious scientific journals or presented at international conferences and other publications that illustrate the scientific achievements and prove that Professor Schoonman's name is associated with high scientific standards.

Mr. Joop Schoonman published 9 books which were printed in Romanian famous publishing houses such as: Academiei Publishing House, University "Transilvania" Brasov Publishing House etc. He is also a publisher of the EnvEdu a series launched as a result of an international collaboration within the curricula development Socrates Erasmus program „Management of Chemical Investigation in Environment Protection, financed by the European Union.

His prestigious activity within the field of sustainable energy promotion, led to the award of the Royal/Shell Price for Sustainable Development and Energy awarded by the queen of Holland and Shell Company.

Apart from Professor Schoonman's scientific profile and educational contributions to Solid State Chemistry and Sustainable Energy Development, his modesty and opening towards knowledge transfer and international co-operation are impressive for all his collocutors.

Mr. Joop Schoonman constantly and honestly sustained the Chemistry specialization founded at our university in the year 1997. In august 2001, he participated at Constantza organized meeting in the curricular development Socrates Erasmus program "Management of Chemical Investigation in Environment Protection".

Moreover he has been a close guide to our students who participated effectively by the mobilities within the program Socrates Erasmus from 2003 - present at the research activity of the Inorganic Chemistry laboratory of Technical University of Delft.

In addition of all these, he facilitated the access to the research equipment from the laboratory under his guidance for all our university staff who went to the Technical University of Delft. Thus, some research work has been carried out and presented at different international conferences and then published.

Prof.univ.dr. Elisabeta Chirila
Editor –in chief