



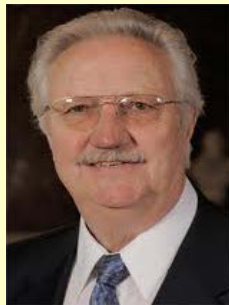
# Fondation Francqui-Stichting

Fondation d'Utilité Publique - Stichting van Openbaar Nut

## **Ceremony of the Francqui Prize by His Majesty The King Baudouin at the "Fondation Universitaire" on June 5, 1985**

*Curriculum Vitae - Report of the Jury*

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Amand Lucas

### *Curriculum Vitae*

Born at Liège, on December 18, 1936

#### *Diploma Academics :*

Licence in Physical Sciences, Université de l'Etat à Liège, 1960

Aggregation of Higher Average Teaching, Université de l'Etat à Liège, 1960

Doctorate in Sciences, Université de l'Etat à Liège, 1966

#### *Functions :*

Full Professor aux Facultés Universitaires Notre-Dame de la Paix à Namur

#### *Curriculum vitae:*

Assistant, Université de l'Etat à Liège, 1960-1961

Candidate of the Fonds National de la Recherche Scientifique, 1962-1966

Responsible for Research of the Fonds National de la Recherche Scientifique

Postdoctoral Research Fellow, Battelle Memorial Institute, Columbus, Ohio (USA), 1967-1968

Researcher qualified at the Fonds National de la Recherche Scientifique, Visiting Scientist, International Center for Theoretical Physics, Trieste, Italy, 1969-1970

Researcher qualified of the Fonds National de la Recherche Scientifique, Visiting Scientist, European Space Technology Center (Surface Physics Division),

Noordwijk, The Netherlands, 1971-1972  
Associated lecturer , Université de l'Etat à Liège, 1973  
Director of the Department of Physics, Facultés Universitaires Notre-Dame de la Paix à Namur, 1974-1977  
Adjunct Professor of Physics, Graduate School of the Science Faculty, Pennsylvania State University, University Park, Pennsylvania (USA), 1975-1980  
Holder of the Francqui Chair, Université de l'Etat à Mons, 1975  
World Trade Visiting Scientist, IMB Research Center, York-towhheights, New York (USA), 1978-1979  
Holder of 5 "NATO RESEARCH GRANTS", 1972-1973 - 1976-1977 - 1978-1979 - 1979-1982 - 1984-1985.  
Fellow off the American Physical Society.

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### *Report of the Jury (April 13, 1985)*

Considering the originality and the creativity of his work;

considering his discovery of vibrationnels novel modes of surface in the ionic crystals, generally indicated by "Lucas modes";

considering his work of pioneer on the interactions between electrons and modes of surface which contributed a determining share for the comprehension of the surface dynamic processes;

considering the clarification of the importance of the role of the plasmons of surface in the surface energy of metals;

considering his theory of the internal forces in irradiated materials and in particular the formation of rare gas bubbles in materials of the nuclear reactors and the way in which they cause the partial destruction (blistering) on the surface;

decide to award the Francqui Prize 1985 to Mr Amand LUCAS, Professor at the Facultés Universitaires Notre-Dame de la Paix à Namur.

Jury members :

**Professor Thomas J. WILLMORE**

Professor at the University of Durham  
Department of Mathematical Sciences  
UK

*Chairman*

and

**Professor Jacques CHAUVIN**

Professor at the l'Université d'Aix-Marseille II  
Institut de Mécanique des Fluides  
France

**Professor Siegfried GROSSMAN**

Professor at the Philipps-Universität-Marburg  
Fachbereich Physik  
Germany

**Professor John Raymond HOBBS**

Professor at the Westminster Hospital  
Department of Chemical Immunology  
London - UK

**Professor Jörg HÜFNER**

Professor at the Universität-Heidelberg  
Institut für Theoretical Physik  
Germany

**Professor Jean LIMIDO**

Directeur de l'Ecole Nationale Supérieure du Pétrole  
et des Moteurs, Institut Français du Pétrole  
Rueil-Malmaison - France

**Professor Stig LUNDQVIST**

Professor at the Chalmers University of Technology  
Göteborg - Sweden

**Professor J.R. Anthony PEARSON**

Professor em. at the Imperial College of Science and Technology, London  
Head of Mathematical Modelling  
Department at Schlumberger Cambridge Research  
Visiting Professional Fellow, University of Wales  
Cambridge - UK

**Professor Kurt SCHAFFNER**

Professor, Director at the Max-Planck-Institut für Strahlenchemie  
Mülheim-Ruhr - Germany

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