

GYRGY MAROSI

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BIRTH: 16 May 1955, Budapest, Hungary

NATIONALITY: Hungarian

EDUCATION

BSc, Chemical Faculty of Technical University of Budapest 1979

MSc, Chemical Faculty of Technical University of Budapest 1981

Ph.D. Chemistry, Hungarian Academy of Sciences, and Technical University of Budapest 1991

CAREER/EMPLOYMENT

- Visiting Associate Professor at the University of Miskolc (1998-present)
- Associate Professor at the Budapest University of Technology and Economics (1994-present)
- Senior Research Fellow at the Hungarian Academy of Sciences (1991-1994)
- Research Fellow at the Hungarian Academy of Sciences (1979-1991)

MAIN FIELD

Fire Retardancy

OTHER FIELDS

Recycling, environmental technologies of organic chemistry.

CURRENT RESEARCH INTERESTS

Chemical and physical modification of interfaces in polymer systems and flame retarded systems, computer controlled syntheses.

HONOURS

- Member of scientific advisory board of the Polymers for Advanced Technologies journal and several conferences.
- Member of committees of Mater. Sci. and Plast. Mat. of Hungarian Academy of Sciences.
- Tempus scholarships: Duisburg (Germany) 1991.
- Lyon (France) 1996.
- Visiting fellow of Jesus College Cambridge (UK) since 1991.

NUMBER OF PAPERS: 53

NUMBER OF COMMUNICATIONS: 91

NUMBER OF BOOKS: 2

Proposed CUAP Research Area: *Methods for Enhancing Flame Retardance and Recyclability of Plastics.* Proposed collaboration between Professor Gordon Nelson (Department of Chemistry, Florida Tech) and Professors Gyorgy Marosi and Gyorgy Keglevich (Department of Chemical Technology, BUTE). Plastics used in electrical/electronic applications have been of particular concern to environmentalists because of the need to use halogenated additives for product safety (fire retardancy). The concern is that halogen additives may give off halogenated dioxins and furans during combustion or contribute to environmental issues upon disposal. Product ecolabels in Europe have tended to exclude halogens in plastics products. One approach in Europe has been to simply not use flame retardant plastics and for product safety to rely on electronic part design. Recent data for television sets show that that approach, however, may lead to an increase in external fires since the plastics used will not resist ignition by even small ignition sources such as candles. The thrust of this joint project is to focus on new approaches to the ignition resistance of polyolefins and polystyrene which do not use halogen yet result in minimal loss of physical properties and maintain recyclability.

Principal Investigators: Drs. Gyorgy Marosi, Peter Anna, Gyorgy Keglevich, Department of Organic Chemical Technology (BUTE) and Dr. Gordon L. Nelson, Department of Chemistry (Florida Tech).

Project Costs: Year 1: 3500 USD; Year 2: 7000 USD; Year 3: 3500 USD.