

EDMOND MAGNER

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EDUCATION

- 1979-1983 B.Sc. in Chemistry with First Class Honours, University College, Cork. Minor subject: Biomathematics. College Scholar 1981, College Scholarship, 1982.
- 1983-1985 M.S. in Chemistry, University of Rochester, Rochester, New York.
- 1985-1988 Ph.D. in Chemistry, University of Rochester, Rochester, New York., *Electrochemical and Photochemical Studies of Cytochrome c and Hemoglobin.*

EMPLOYMENT HISTORY

- 1989-1992 Postdoctoral research assistant with Professor W.J. Albery, FRS, Department of Chemistry, Imperial College, London.
- 1989-1993 Postdoctoral research assistant with Professor A.M. Klibanov, Department of Chemistry, Massachusetts Institute of Technology, Cambridge, MA.
- 1994-1996 MediSense, Inc., Scientist (1994-1996), Senior Scientist, (1996), Waltham, MA, USA
- 1996-1997 Abbott Laboratories, Senior Scientist (1996-1997), Bedford, MA, USA.
- 1997- Lecturer (1997-2002), Senior Lecturer (2002-2007), Associate Professor (2007-2012), Professor of Electrochemistry (2012-) Department of Chemical and Environmental Sciences, University of Limerick.
- 2003- 2010 Director, Materials and Surface Science Institute, University of Limerick.
- 2014 - Dean, Faculty of Science and Engineering, University of Limerick

RECENT REFEREED JOURNAL PUBLICATIONS

1. Pitzalis, F., Carucci, C., Naseri, M., Fotouhi, L., Magner, E., Salis, A. Lipase Encapsulation onto ZIF-8: A Comparison between Biocatalysts Obtained at Low and High Zinc/2-methylimidazole Molar Ratio in Aqueous Medium, *ChemCatChem*, 2018, 10, 1578-1585.
2. Lopez, F., Siepenkoetter, T., Xiao, X., Magner, E., Schuhmann, W., Salaj-Kosla, U. Potential pulse-assisted immobilization of *Myrothecium verrucaria* bilirubin oxidase at planar and nanoporous gold electrodes, *J. Electroanal. Chem.* 2018, 812, 194-198.
3. Xiao, X., Siepenkoetter, T., Whelan, R., Salaj-Kosla, U., Magner E. A continuous fluidic bioreactor utilising electrodeposited silica for lipase immobilisation onto nanoporous gold, *J. Electroanal. Chem.* 2018, 812, 180-185.
4. Xiao, X., Siepenkoetter, T., Conghaile, P.O., Leech, D., Magner, E. *ACS App. Mat. Int.* 2018, 10, 7107-7116.
5. Lyons, C., Dev, P. Maji, P., Rathi, N., Surolia, P.K., Byrne, O., Xiao, X., English, N.J., Magner, E., MacElroy, J.M.D., Thampi, K.R. Silicon-bridged triphenylamine-based organic dyes for efficient dye-sensitised solar cells. *Solar Energy*, 2018, 160, 64-75.
6. Carucci, C., Salis, A., Magner, E. Electrolyte effects on enzyme electrochemistry, *Curr. Opin. Electrochem.* 2017, 5, 158-164.
7. Xiao, X., O'Conghail, P., Leech, D., Ludwig, R., Magner, E. An oxygen-independent and membrane-less glucose biobattery/supercapacitor hybrid device. *Biosens. Bioelect.*, 2017, 98, 421-427.
8. Siepenkoetter, T., Salaj-Kosla, U., Xiao, X., Magner, E. The Immobilization of Fructose Dehydrogenase on Nanoporous Gold Electrodes for the Detection of Fructose, *ChemelectroChem*, 2017, 4, 905-912.
9. Siepenkoetter, T., Xiao, X., Salaj-Kosla, U., Pita, M., Ludwig, R., Magner, E. Immobilisation of redox enzymes on nanoporous gold electrodes: applications in biofuel cells, *ChemplusChem*, 2017, 82, 553-560.
10. Xiao, X., O'Conghail, P., Leech, D., Magner, E. A symmetric supercapacitor/biofuel cell hybrid device based on enzyme-modified nanoporous gold: an autonomous pulse generator. *Biosens. Bioelect.*, 2017, 90, 96-102.

PATENTS

1. Apparatus for the extracorporeal treatment of blood, EP2886142. Cooney, J., Kagawa, T. F. Magner, E. January 2016.
2. Apparatus for the extracorporeal treatment of blood, US 9,422,541. Cooney, J., Kagawa, T. F. Magner, E.

EDITORIAL POSITIONS IN JOURNALS

Guest co-editor, Chemical Society Reviews, issue on enzyme immobilization, 2013.

Guest co-editor, Electroanalysis, issue on the occasion of the 60th birthday of Prof. W. Schuhmann, 2016.

RESEARCH SUPERVISION:

22 PhD theses, 11 M.Sc. theses to completion

Currently supervise 4 PhD students

EXTERNAL Ph.D. EXAMINER

Ireland: UCD, UCC, NUI Maynooth, DCU, NUI Galgaw

External to Ireland: Imperial College, Southampton, Bath, Oxford, Cranfield (UK), Lorraine (France), Baroda (India), Potsdam (Germany), Aalto University (Finland)

CONFERENCES

- 11 keynote/plenary presentations
- 22 oral international conference presentations
- 45 oral international and national conference presentations given by my research group
- >150 poster presentations

CONFERENCE ORGANISATION

Bioelectrochemistry XXIV, 2019 (Chair)

Electrochem 2012, Member of Organising Committee

SmartSurfaces 2012, Member of Organising Committee

Nanomaterials IOM³ Session chair

International Society of Electrochemistry Spring Meeting, Member of Organising Committee

International Conference on Synthetic Metals, Member of Organising Committee

BA Festival of Science, Symposium Chair

ESEAC X 2004, Member of Organising Committee

ELECTROCHEM 2000, Member of Organising Committee

RESEARCH GRANTS

Secured over €25 million in research funding as lead PI

- Secured individual research funding of over €5 million
- Secured research funding of over €20 million for UL (€10 million for buildings, €8 million for equipment, €2 million for PhD and postdoctoral researchers).

PROPOSAL AND MANUSCRIPT REVIEW

Enterprise Ireland, EPSRC, BBSRC (UK), ANR (France), EU H2020, Marie Curie Fellowships, Russian Federation Academic Exchange, Bulgarian Academy of Sciences, Grant Agency of the Czech Republic, INTAS,

Referee for range of journals including including Ang. Chem. Int. Ed., Nature Materials, J. Amer. Chem. Soc., Chem. Comm, Langmuir, J. Phys. Chem. B, Elect. Comm., Anal. Chem., Adv. Mater., J. Mol. Cat. B, etc.

MEMBERSHIP OF PROFESSIONAL SOCIETIES

- Fellow Royal Society of Chemistry
Chair, Republic of Ireland Sub-Region, Analytical Division, Royal Society of Chemistry, 1999-2002
- Fellow Institute of Chemistry of Ireland
- Member of the International Society of Electrochemistry
Regional representative, Irish section of International Society of Electrochemistry, 2003-2009.
- Member of the Bioelectrochemical Society
Member Executive Committee, Bioelectrochemical Society, 2016 – 2019.
- Member of the Electrochemical Society

MEMBERSHIP OF PROFESSIONAL ORGANISATIONS

- Committee member, Irish Research Scientists Association, 1998-2003
- Chair, Irish Research Scientists Association, 2001.
- Vice-Chair, Materials Ireland, 2008-2010
- Chair, Materials Ireland, 2010-2012