



Rok ukończenia studiów, wydział, specjalność:

1976 r. – Wydział Chemiczny Politechniki Wrocławskiej, specjalność: *Inżynieria Chemiczna*.

Przebieg pracy zawodowej:

od 07.2006 r. – Reader in Chemical Engineering, University of Bath, Department of Chemical Engineering;

01.1998 r.-06.2006 r.- Senior Lecturer, University of Bath, Department of Chemical Engineering;

01.1996 r.-12.1997 r.- Privatdozent in Institute of Technical Chemistry, Technical University Munich;

01.1986 r.-12.1995 r.- Assistant Professor in Institute of Technical Chemistry, Technical University Munich, Germany;

10.1980 r.-12.1985 r. – Adiunkt w Instytucie Inżynierii Chemicznej i Urządzeń Ciepłych, Politechnika Wrocławska;

01.1979 r.-09.1980 r.- Asystent w Instytucie Inżynierii Chemicznej i Urządzeń Ciepłych, Politechnika Wrocławska;

10.1976 r.-12.1978 r.- Doktorant w Instytucie Inżynierii Chemicznej i Urządzeń Ciepłych, Politechnika Wrocławska.

Osiągnięcia:

Osiągnięcia naukowe:

Uzyskane tytuły naukowe:

1980 r. – Doktorat, Dr nauk technicznych, Instytut Inżynierii Chemicznej i Urządzeń Ciepłych, Politechnika Wrocławska.

1995 r. – Habilitacja (Dr nauk podstawowych), Technische Universität München, specjalność: Technische Chemie – Chemia Techniczna.

Publikacje:

1. A.A. Lapkin, P.K. Plucinski, Engineering Factors for Efficient Flow Processes in Chemical Industries, in *“Chemical Reactions and Processes Under Flow Conditions”*, Eds. Eduardo Garcia-Verdugo Cepeda and Santiago Luis, RSC, Cambridge, UK, 2010, ISBN: 978-85404-192-3.
2. P. Plucinski, Micellar Extraction of Phenols from Carbolic Oil, **Int. J. Heat Mass Transfer**, 28, 451-458 (1985).
3. W. Nitsch, P. Plucinski, Two phase kinetics of the solubilization in reverse micelles, **J. Colloid Interface Sci.**, 136, 338-351 (1990).
4. P. Plucinski, W. Nitsch, The Kinetics of Interfacial Phenylalanine Solubilization in a Liquid/liquid Microemulsion System, **J. Phys. Chem.**, 97, 8983-8988 (1993).
5. U.A. Daiminger, A.G. Geist, W. Nitsch, P. K. Plucinski, The Efficiency of Hollow Fiber Modules for Nondispersive Chemical Extraction, **Ind. Eng. Chem. Res.**, 35, 184-191 (1996).
6. G.R. Williams, S.T. Kolaczowski, P.Plucinski, Catalyst instabilities during the liquid phase partial oxidation of methane, **Catalysis Today**, 81, 631-640 (2003).
7. P.K. Plucinski, D.V. Bavykin, S.T.Kolaczowski, A.A. Lapkin, Liquid phase oxidation of organic feedstock in a compact multichannel reactor, **Ind. Eng. Chem. Res.**, 44, 9683-9690 (2005).
8. X. Fan, M. Gonzalez Manchon, K. Wilson, S.Tennison, A. Kozynchenko, P.K. Plucinski, A.A. Lapkin, Coupling of Heck and hydrogenation reactions in a continuous compact reactor, **Journal of Catalysis**, 267, 114-120, 2009.



9. U. Laska, C.G. Frost, G.J. Price, P.K. Plucinski, Easy-separable magnetic nanoparticle-supported PD catalysts: kinetics studies, catalyst reuse, and stability, **Journal of Catalysis**, **268**, 2009, 318-328.
10. P.M. Álvarez, J.Jaramillo, F. López-Pinero, P. Plucinski, Preparation and characterization of magnetic TiO₂ nanoparticles and their utilisation for the degradation of emerging pollutants in water, Appl. Catal. B: **Environmental**, **100**, 338-345, 2011.

Projekty badawcze:**Politechnika Wroclawska**

Przemysł 1984/1985

Modernisation of phenol recovery step in coking plant
Wałbrzych, with Dr W. Skrzypiński, Dr J. Sobesto.

PAN 1985/1988

Permeation of Dipeptides and Phosphono dipeptides through
Liquid Emulsion Membranes, PAN CPBP 01.13. Programme.

#) Industry direct, Coking plant Wałbrzych, Poland

*) Polish Academy of Sciences

Technische Universität München

DFG# DM 1,283,700

Project D 6: "Micelles formation At the liquid/liquid interface"

1988/2000

in Sonderforschungsbereich 266: "Regulation of the Organisation and Function of Synthetic and Biological Interfaces via Macromolecules and Molecular Aggregates" with Prof. W. Nitsch (PI, TU Munich).

KFZ* DM 248,000

Oct.1997/Sept.2000

Investigations of the Suitability of Micellar Systems to Extract
Radionuclides Complexed with Humic Acids, with Prof. W. Nitsch (TU Munich).

#) Deutsche Forschungsgemeinschaft (German Research Council)

*) Institute of nuclear Waste Disposal, Karlsruhe Research Centre, Germany

University of Bath:

EU* €235,215

Feb.1998/Jan.2001

"Novel Karbon Support for Liquid Phase Catalysts", Bite EuRam
Project No BE97-4407, with Prof. W.J. Thomas.

EPSRC* £331,043

(£174k for Bath)

Liquid phase catalytic partial oxidation of hydrocarbons in
multiphase membrane contactor using heteropoly acids, with
Dr Alexei Lapkin (Bath) and Prof. I. Kozhevnikov (PI), Prof. E.
Deruane (LCIC, Liverpool).

Oct.2000/March

HEFCE

£100,000

April 2000/March
2003*UK-Brazil Collaborative Research Networks Programme,*
CATALYSIS NETWORK,
Prof. E.G. Deruane, Prof. J.C. Vedrine, Dr I. Kozhevnikov, Dr.
S.B. Deruane-Abd Hamid (University of Liverpool); Prof.
G.J. Hutchings, Dr S. Taylor 9The University of Wales at
Cardiff); Prof. W.J. Thomas, Dr D.B. Lukyanov, Dr A.A. Lapkin
(University of Bath); Prof. J. Ray Walls, Prof. P.L. Jones, Dr M.J.
Slater, Dr R. Bickley, Dr A. Ovenston (University of Bradford).
Industrial Catalytic Processes Course: - additional material,
technical support and funding for bursaries, with Dr A. Lapkin

EPSRC

£7,500

Oct.2001/Jan.2002



EU*	€506,534 April 2002/ Sep.2005	(PI) and Prof. S.T. Kolaczowski. <i>Compact Reactor and CarbonSupported Catalyst System for Multiphase Air Oxidation</i> , EU Grant No. G5RD-CT-2002-00724, with Prof. S.T. Kolaczowski, Dr A. Lapkin, Dr D.B.Lukyanov.
EPSRC	£8,025 Oct.2003/Nov.2003	<i>Industrial Catalytic Processes Course: funding for bursaries</i> , with Dr A. Lapkin (PI) and Prof. S.T. Kolaczowski.
MoD	£55,000	<i>Integrated System for the Management of Grey and Black Water On Submarines</i> , with Dr R. England (PI), Prof. B.D. crittenden and Dr T.C. Arnot.
EPSRC*	£101,836 Feb.2005/Aug.2006	<i>Engineered magnetic fluid materials for homogeneous catalysts</i> , Dr G.J. Price and Dr C.G. Frost (Department of Chemistry, University of Bath).
Unilever*	£85,00 Nov.2005/Oct.2008	<i>Development of membrane assisted techniques for the production/separation/segregation of nano sized emulsions and particles</i> , with Dr T.C. Arnot.
EPSRC*	£533,798 (FEC £632,7k) Oct.2006/Sept.2009	<i>Engineering Functional Materials for Catalytic Smart Microreactors</i> , with Dr A. Lapkin (Chem. Eng.) and Dr G.J. Price and Dr C.G. Frost (Department of chemistry, University of Bath). Part of collaborative project with Universities of Durham and Liverpool (total cost £1.08 m).
MMV#	£116,000 (FEC) Oct.2006/Sept.2009	<i>Artemisinin Extraction Study</i> , together with Dr A. Lapkin (PI).
EPSRC	£222,755 (FEC £268,4k) June2009/ May 2011	<i>A Flow Process For Aminomethylations sing Catalysts Supported on Magnetic Nanoparticles</i> , together with Dr C.G.Frost (PI) and Dr G.J. Price (Department of Chemistry).
EPSRC	£551,1k (FEC £ 647.5k) 2009/June 2012	<i>New Generic Synthetic Protocols for Pharmaceutical Intermediates Based on Continuous Flow Multifunctional Platforms</i> , Together with Dr A.A. Lapkin and Prof. J.M.J. Williams (PI, Department of Chemistry).
EPSRC	£1.15 m (FEC £ 1.4m) May 2010/ April 2013	<i>Nano-Integration of Metal-Organic Frameworks and catalysis for the Uptake and Utilisation of CO₂</i> , together with D. Mattia (Chem. Eng.), A. Burrows, P. Cameron, K.J. Edler, M. Jones, F. Marken (PI), S. Pascu, P.Raithby (Chemistry), G. Hammond, M. McManus (Mech. Eng.), D.J. Fermin (Chemistry, University of Bristol), J. Greenman (Life Sciences, UWE, Bristol), Y. Ieropoulos (Bristol Robotics Laboratory).

*) as Principal Investigator

#MMV – Medicines for Malaria Venture, Switzerland

EPSRC = Engineering and Physical Sciences Research Council

MoD = Ministry of Defence

Osiągnięcia techniczne:*Consultancy:***Ministra of Demence**, UK, on the *Development of Integrated System for the Management of Grey and Black Water on Submarines*, (2003/2004).



Medicine for Malaria Venture, Switzerland, on the *Comparative assessment of feasibility and environmental performance of different solvent for extraction of natural antimalarial compound Artemisinin*, (2006).

QinetiQ, UK, on the *Submarine Integrated Waste Management Systems*, (2007/2008).

Osiągnięcia organizacyjne:

Kierownik Biura Organizacyjnego:

- 7 Ogólnopolskiej Studenckiej Giełdy Piosenki Turystycznej, Szklarska poręba, 1974 r.
- 8 Ogólnopolskiej Studenckiej Giełdy Piosenki Turystycznej, Szklarska poręba, 1975 r.
- Przewodniczący Komitetu Organizacyjnego „3rd International Symposium on Multifunctional Reactors & 18th Colloquium on Chemical Reaction Engineering”, University of Bath, 27-29 sierpnia 2003 r.

Współpraca z Politechniką Wrocławską po ukończeniu studiów:

- Współpraca w ramach Unii Europejskiej (ERASMUS):

Prowadzenie trzech prac dyplomowych studentów Wydziału Chemicznego Politechniki Wrocławskiej:

1. Agnieszki Fajdasz, *Synthesis and application of magnetic fluid based catalysts*, 10/2005 – 05/2005 r.
2. Marii Kubien, *Enzymatic hydrolysis of cellulose in ionic liquids*, 10/2005 – 05/2005 r.
3. Ilony Węgrzyn, *Hydrogenation of dimethyl itaconate using recoverable catalyst based on magnetic nanoparticles*, 10/2008 – 05/2009 r.

- Staż podoktorski: dr Urszula Laska z zespołu prof. Kazimierzy Wilk.

- Doktorat: Justyna Dyla. Interdyscyplinarne studia na Politechnice Wrocławskiej. Promotorzy: prof. Paweł Kafarski i dr hab. P. Pluciński.

- Współpraca z prof. Pawłem Kafarskim:

Permeation of Dipeptides and Phosphono Dipeptides through Liquid Emulsion Membranes, PAN CPBP 01.13 Programme.

1. P. Kafarski, B. Lejczak, P. Pluciński, Diphenylphosphonate ester cleavage catalysed by hydrophilic ammonium ions, **Tetrahedron**, **43**, 799-803 (1987).
2. P. Kafarski, W. Skrzypiński, M. Bryjak, P. Pluciński, P. Wieczorek, Permeation of amino acids, dipeptides and their phosphonic analogues through liquid membranes, in: **Peptide Chemistry 1987**, Eds. T. Shiba and S. Sakahibara, pp. 717-720, Protein Research Foundation, Osaka, 1988.
3. W. Skrzypiński, E. Sierleczo, P. Pluciński, B. Lejczak, P. Kafarski, Permeation of Dipeptides and Phosphono Dipeptides through Liquid emulsion Membranes; Stereoselectivity of the Process, **J. Chem. Soc. Perkin Trans.2**. No.5, 689-693 (1990).