CURRICULUM VITAE

Dr Mikhail A. Filatov
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• Professional Experience

10/2017–current	Assistant Lecturer Technological University Dublin, Ireland
09/2015 – 09/2017	Marie Curie Research Fellow (IF) School of Chemistry, Trinity College Dublin, Ireland
04/2014 – 07/2015	Visiting Scientist Institute of Polymers, Bulgarian Academy of Sciences, Sofia, Bulgaria
02/2010 – 03/2014	Postdoctoral Fellow Max Planck Institute for Polymer Research, Mainz, Germany
12/2008 – 12/2009	CNRS Postdoctoral Fellow Institute of Molecular Chemistry, University of Burgundy, Dijon, France
06/2008 – 07/2008	Visiting Scientist Department of Biochemistry and Biophysics, University of Pennsylvania, Philadelphia, USA
10/2005 – 10/2008	Managing Director Esterkem Ltd., private chemical company, Moscow, Russia

• Education

01/2020 – 06/2020	Postgraduate Certificate in University Learning and Teaching Learning, Teaching and Technology Centre (LTTC), TU Dublin, Ireland
10/2005 – 11/2008	PhD in Organic Chemistry Department of Chemistry, Moscow State University, Moscow, Russia Thesis title: "General synthetic approach to porphyrins and dipyrrins with π-extended system". Supervisors: Prof. Irina Beletskaya, Dr. Andrei Cheprakov
09/2000 – 07/2005	Diploma of Chemist (with honours) Department of Chemistry, Moscow State University, Moscow, Russia

• Research Interests

Multistep organic synthesis (π-extended porphyrins, dipyrrins, BODIPYs). Synthesis of materials (polymeric nanoparticles, biopolymers, graphene oxide, metal-organic frameworks). Singlet oxygen (generation, sensing, reactivity). Photoinduced electron transfer in donor-acceptor dyads. Intersystem crossing in heavy-atom-free molecules. Photodynamic therapy. Triplet-triplet annihilation photon upconversion. Photocatalysis.

• Funding and Support

2020 – current	TU Dublin First Time Supervisor Award Project: "Heavy-Atom-Free Photosensitizing Materials"
2015 – 2017	European Commission, Horizon 2020 program Project: "Controlled Singlet Oxygen Release Sensitizer in Photodynamic Therapy"
2015 – 2014	Max Planck Society Scholarship
2007 – 2008	Scholarship of the President of Russian Federation for outstanding PhD students
2005	Russian Foundation for Assistance to Small Innovative Enterprises Project: "Development of Technology of 24-Epibrassinolide Production"

• Teaching

CHEM1007 – Introduction to Chemistry, CHEM2008 – Organic Chemistry, CHEM2022 – Spectroscopy, CHEM2024 - Pharmaceutical & Bioorganic Chemistry, CHEM2025 - Medicinal Chemistry & Pharmchem Processes, CHEM3011 - Organic Chemistry & Stereochemistry, CHEM4008 - Topics in Medicinal Chemistry

• Scientific Journals Reviewer

Chemical Communications, Angewandte Chemie International Edition, Chemical Science The Journal of Organic Chemistry, Chemistry – A European Journal, Chemistry – An Asian Journal, New Journal of Chemistry, ChemistrySelect, Electroanalysis, Chemistry and Biodiversity, Physical Chemistry Chemical Physics, Journal of Physical Chemistry, Dyes and Pigments, Photochemical and Photobiological Sciences, RSC Advances, ChemPhotoChem, ChemPhysChem

• Publications

Summary: 29 scientific papers published (including 12 as a corresponding author), 1 book chapter, 4 patents.
h index = 16 (Google Scholar)
> 900 citations
Orcid ID: orcid.org/0000-0002-1640-841X
https://scholar.google.bg/citations?user=g1IdjV4AAAAJ&hl=ru

Selected Research Papers

M.A. Filatov,* S. Karuthedath, P.M. Polestshuk, S. Callaghan, K. Flanagan, M. Telitchko, T. Wiesner, F. Laquai, M.O. Senge. Control of triplet state generation in heavy atom-free BODIPY–anthracene dyads by media polarity and structural factors. *Phys. Chem. Chem. Phys.*, **2018**, *20,* 8016-8031.

M.A. Filatov,***** S. Karuthedath, P.M. Polestshuk, H.Savoie, K.J. Flanagan, C. Sy, E. Sitte, M. Telitchko, F. Laquai, R.W. Boyle, M.O. Senge. Generation of Triplet Excited States via Photoinduced Electron Transfer in *meso*-anthra-BODIPY: Fluorogenic Response toward Singlet Oxygen in Solution and *in Vitro*. *J. Am. Chem. Soc.*, **2017**, *139*, 6282−6285.

M.A. Filatov,* S. Baluschev, K. Landfester. Protection of Densely Populated Excited Triplet State Ensembles Against Deactivation by Molecular Oxygen. *Chem. Soc. Rev.*, **2016**, *45*, 4668-4689.

M.A. Filatov,* S. Baluschev, I.Z. Ilieva, V. Enkelmann, T. Miteva, K. Landfester, S. Aleshchenkov, A.V. Cheprakov. Tetraanthraporphyrins: synthesis, structure and optical properties. *J. Org. Chem.*, **2012**, *77*, 11119−11131.

M.A. Filatov, A. Y. Lebedev, S.N. Mukhin, S. A. Vinogradov and A. V. Cheprakov. π-Extended Dipyrrins Capable of Highly Fluorogenic Complexation with Metal Ions. *J. Am. Chem. Soc.*, **2010**, *132*, 9552-9554.

Patents

1. Long-term stable composition, such as phosphorescent composition or TTA-photon upconversion composition, EP 2 851 407 A1, US 2016/0222286 A1, WO 2015/044129 A1, **2015**

2. Method of Synthesis of 5,5'-Disubstituted π-extended Dipyrromethenes and Their Use as Analytical Reagents for Metal Ions and Fluorescent Imaging Probes, US 2011/0144351 A1, **2009**

3. Method of Reduction of Unsaturated Ketones into Saturated Ketones, RU 2 293 720 C1, **2007**

4. Method of Synthesis of 24-Epibrassinolide, RU 2 272 044 C1, **2006**

• Memberships in Professional Societies

American Chemical Society
Society of Porphyrins and Phthalocyanines
Marie Curie Fellows Association
Marie Curie Alumni Association (Irish chapter)