

Prof. Donal O'Shea
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Full Publication List

- 99 Cheung, S.; Wu, D.; Daly, H.; Busschaert, N.; Morgunova, M.; Simpson, J.; Scholz, D.; Gale, P.A.; O'Shea, D.F. "Real-time Recording of the Cellular Effects of the Anion Transporter Prodigiosin" *Chem* 2018, in press.
- 98 Cheung, S.; O'Shea, D.F. "Directed self-assembly of fluorescence responsive nanoparticles and their use for real-time surface and cellular imaging". *Nature communications*, **2017**, 8(1), 1885.
- 97 Wu, D.; O'Shea, D.F. "Fluorogenic NIR-probes based on 1,2,4,5-tetrazine substituted BF₂-azadipyrrromethenes". *Chemical Communications*, **2017**, 53(78), 10804-10807.
- 96 Wu, D.; O'Shea, D.F. "Comparative triad of routes to an alkyne-BF₂ azadipyrrromethene near-infrared fluorochrome". *Tetrahedron Letter*, **2017**, 58(47), 4468-4472.
- 95 Daly, H.C.; Sampedro, G.; Bon, C.; Wu, D.; Ismail, G.; Cahill, R.A.; O'Shea D.F. "BF₂-azadipyrrromethene NIR-emissive fluorophores with research and clinical potential". *European Journal of Medicinal Chemistry*, **2017**, 135, 392-400.
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Patents

- O’Shea, D.F., “Fluorescent nanoparticles” UK Patent Application Number 1717590.2
- O’Shea, D.F., Killoran, J., Gallagher, W.M. “Compounds useful as photodynamic therapeutic agents” *United States Patent No. 7,220,732*, May 22, **2007**.
- O’Shea, D.F., Killoran, J., Gallagher, W.M. “Compounds useful as photodynamic therapeutic agents” European Patent Application No: 03720375.9
- O’Shea D.F. “Novel fluorescent near-infrared (NIR) dyes” International Patent Application No: PCT/EP**2010**/065991.
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Oral Presentations

- Invited Lecture: B.E.S.T Innovation Symposium, Strasbourg, Aug. 28th 2015.
- Invited Lecture: Catalysis and Sensing for the Environment Symposium, Trinity College Dublin, July 9th, 2015.
- Invited Lecture: Mater Hospital Dublin, Grand Rounds, June 17th, 2015.
- Invited Lecture: University of Bahrain, RCSI, May 28th, 2015.
- Invited Lecture: 9th Symposium on Cell Based Assay & Screening Technologies, Dublin, Oct. 8th 2014.
- Invited Lecture: Cardiff University, Oct. 1st 2014.
- Fluorescent Biomolecules FB³ Conference, San Diego, USA; Aug 7 – 9th 2014.
- 248th ACS National Meeting, San Francisco, USA, 12th Aug., 2014.
- Invited Lecture: 4th Bilateral Symposium on Frontiers in Organic Synthesis, University of Science and Technology, China, Hefei, China, July 28th 2014.
- Invited Lecture: Soochow University, China, July 23rd 2014.
- Invited Lecture: Ireland-China Symposium on Nanotechnology, Trinity College Dublin, May 13th, 2014.
- Invited Lecture: Shanghai Institute for Organic Chemistry, Shanghai, Mar. 21st 2014.
- Invited Lecture: Donghau University, Shanghai, Mar. 19th 2014.
- Invited Lecture: University of Ulster, Coleraine, Jan. 10th 2014.
- Invited Lecture: Centre for Systems Medicine, RCSI, Dec 6th 2013.
- Invited Lecture: TU Dortmund University, May 28th 2013.
- Invited Lecture: RSC Awards Symposium, Trinity College Dublin, May 24th 2013.
- Invited Lecture: Catalysis and Sensing for the Environment Symposium, University of Texas at Austin, April 11th-13th 2013.
- 245th ACS National Meeting, New Orleans, USA; April 6th – 10th 2013 (three different lectures presented).
- Invited Lecture: Symposium on Molecular Devices, Queens University Belfast, Dec. 14th 2012.
- Invited Lecture: RSC North-South Lectureship Award; University College Dublin, Nov 8th 2012.
- Invited Lecture: Molecular Oncology - Cell Biology - Department of Biology, Utrecht University, Netherlands, Oct 31st 2012.
- Invited Lecture: School of Chemistry, Newcastle University, UK, 23rd Oct. 2012.
- 244th ACS National Meeting, Philadelphia, USA; Aug. 19th – 23rd 2012 (two different lectures presented).

- Invited Lecture: 3rd Bilateral Sino-Ireland Symposium on Frontiers in Synthetic Chemistry, Trinity College Dublin, July 23-24th.
- Invited Lecture: RSC North-South Lectureship Award; Queens University Belfast, May 2nd 2012.
- Invited Lecture: RSC Symposium on Physical Organic Chemistry; University College Dublin; 20th April 2012.
- Invited Lecture: RSC Organic Chemistry Regional Meeting; National University of Ireland, Galway, 19th April 2012.
- Invited Lecture: Department of Pharmaceutical Science, Donghua University, Shanghai, China; 16th March 2012.
- Invited Lecture: Department of Chemistry, Zhejiang Normal University, Jinhua, China, 12th March, 2012.
- Invited Lecture: Department of Chemistry, University of Liverpool, 6th March, 2012.
- Invited Lecture: Department of Pure and Applied Chemistry, University of Strathclyde; 19th Oct 2011.
- Invited Lecture: UCD Conway Festival of Research and Innovation, University College Dublin; 15th Sept. 2011.
- Invited Lecture: Warner Chilcott, Dundalk; 6th Sept. 2011.
- Invited Lecture: 6th International Symposium on Macrocyclic & Supramolecular Chemistry, University of Sussex, Brighton, U.K.; 3rd July 2011.
- Invited Lecture: 2nd Bilateral Sino-Ireland Symposium, Shanghai Institute of Organic Chemistry, Shanghai, China; 27th June, 2011.
- Invited Lecture: School of Pharmaceutical and Biological Sciences, Avenue du Prof L. Bernard, University of Rennes 1, Rennes, France; 15th June 2011.
- Invited Lecture: School of Chemical Science, Beaulieu Campus, University of Rennes 1, Rennes, France; 9th June, 2011.
- Invited Lecture: Institut de Chimie Moléculaire et des Matériaux d'Orsay, Université Paris-Sud 11, Orsay, France; 7th June, 2011.
- Invited Lecture: 2nd National Conference in Medical Imaging and the Annual MedViz Conference, Bergen, Norway; 17-18th Jan 2011.
- Invited Lecture: RSC Organic Division / Chemistry Biology Interface Forum Symposium; 4th Nov 2010.
- Invited Lecture: School of Chemistry, University of Birmingham; Nov 2nd 2010.
- Invited Lecture: 1st Bilateral Sino-Ireland Symposium on Frontiers in Synthetic Chemistry, University College Dublin, 29th-30th July 2010.
- 9th International Symposium on Carbanion Chemistry, University of Florence, Italy; 20th-24th July 2010.
- Invited Lecture: École Normale Supérieure de Cachan, France; July 8th 2010.
- Invited Lecture: Irish Association for Cancer Research Annual Meeting, Galway; March 3rd – 5th 2010.

- Invited Lecture: Donghau University, Shanghai, China; Jan 9th 2010.
- Invited Lecture: Fudan University, Shanghai, China; Jan 8th 2010.
- Invited Lecture: University of Science and Technology of China, Hefei, China; Jan 6th 2010.
- Invited Lecture: Shanghai Institute of Organic Chemistry, Shanghai, China; Jan 5th 2010.
- Invited Lecture: National University of Ireland, Maynooth; Nov. 12th 2009.
- 238th ACS National Meeting, Washington; August 16th – 20th 2009.
- Invited Lecture: Tallaght Institute of Technology, Dublin; December 2nd, 2008.
- Invited Lecture: 236th ACS National Meeting, Philadelphia, USA; August 2008.
- Invited Lecture: Institut des Sciences Moléculaires, Université Bordeaux 1, France; June 19th 2008.
- Invited Lecture: École Normale Supérieure de Cachan, France; June 13th 2008.
- Invited Lecture: University College Galway, May 7th 2008.
- Invited Lecture; High Throughput Medicinal Chemistry IV, Pfizer Sandwich, UK; May 6th 2008.
- Invited Lecture: School of Chemistry, University of Manchester; Feb 20th 2008.
- Invited Lecture: RSC Chemistry and Cancer Symposium, UCD, Feb 15th 2008.
- Invited Lecture: RSC UK Macrocyclic and Supramolecular Chemistry Meeting, Manchester U.K., Dec 18th –19th 2007.
- Invited lecture: University of Bath, Bath, U.K.; Oct 5th 2007.
- 8th International Symposium on Carbanion Chemistry, Madison, USA; June 6th 2007.
- Invited Lecture: Central European Society for Anticancer Drug Research Meeting, Frankfurt, Germany; June 15th 2007.
- Molecular Imaging Symposium, St. Vincent's University Hospital, May 1st 2007.
- Invited lecture: 8th Annual Symposium on Supramolecular Chemistry in Ireland, Trinity College Dublin; March 30th 2007.
- 232nd ACS National Meeting, San Francisco, USA; Sept. 12th 2006.
- Invited lecture: Trinity College Dublin, July 25th 2006.
- Invited lecture: Dublin Institute of Technology, Kevin Street, Dublin, April 28th 2006.
- Invited lecture: Department of Chemistry, Imperial College London, U.K.; Jan. 24th 2006.
- Invited lecture: Department of Chemistry, University of Glasgow, Scotland; Dec. 9th 2005.
- 230th ACS National Meeting, Washington, USA; Aug. 28th – Sept 1st 2005 (two different lectures presented).

- 10th World Congress of the International Photodynamic Association, Munich, Germany; June 22nd – 25th 2005.
- Invited lecture: National Centre for Biomedical Engineering Science, National University of Ireland, Galway, 27th May 2005.
- Invited lecture: Institute of Physics of Ireland, Newbridge, Kildare, 18th March 2005.
- EURESCO Conference on Chemistry and Physics of Multifunctional Materials, Tomar, Portugal; Sept. 11th - 16th 2004.
- 7th International Symposium on Carbanion Chemistry, Alicante, Spain; July 7th-11th 2004.
- Molecular Imaging Symposium, Mater Hospital, Dublin; Mar. 3rd 2004.
- Invited lecture: Trinity College Dublin, Nov. 13th 2003.
- Invited lecture: Dublin City University, Oct 29th 2003.
- 5th International Symposium on Photodynamic Diagnosis and Therapy in Clinical Practice, Brixen, Italy; Oct. 7th –11th, 2003.
- 226th ACS National Meeting, New York, USA; Sept 7th - 11th 2003 (two different lectures presented).
- Invited lecture: University of Edinburgh, Scotland; April 4th 2003.
- Conway Institute, UCD, Discipline Integration and Technology Transfer Series, Oct. 17th 2002.
- SPIE (International Society for Optical Engineering), Galway; Sept. 2002.
- 224th ACS National Meeting, Boston, USA; August 2002.
- Invited lecture: RSC Annual Supramolecular Chemistry Conference, Trinity College Dublin; March 25th 2002.
- Invited lecture: EuroConference III, Synthesis and Function of Bioactive Molecules, National University of Ireland, Galway; May 10, 1999.

Awards and Distinctions

- ▲ 2017 Institute of Chemistry of Ireland Annual Award for Chemistry (Eva Philbin Public Lecture Series)
- ▲ Royal Society of Chemistry, Inaugural 2012 North/South of Ireland lectureship award.
- ▲ Visiting Professor, March 2012 at Donghua University, Shanghai, China.
- ▲ Visiting Professor, June 2011 at the University of Rennes 1, France.
- ▲ Ulysses France / Ireland research exchange award.
- ▲ Teacher of the Year Award 2011 and 2008 from the School of Medicine and Medical Sciences.
- ▲ Visiting Professor, June 2008 at the École Nationale Supérieure de Cachan, CNRS, UniverSud, 61 av President Wilson, F-94230, Cachan, France.
- ▲ Organizer of the 1st, 2nd and 3rd Bilateral Sino-Ireland Symposia on Frontiers in Synthetic Chemistry.

- ▲ Research has been highlighted in international publications and media such as:
SciBX (Science-Business Exchange) **2010**, Oct 14, Vol 3, No 40. see *SciBX* 3(40);
doi:10.1038/scibx.2010.1220.
SYNFACTS, see Synfacts **2009**, 6, 0656 and Synfacts **2005**, 1, 0115.
Chemical & Engineering News, **2005**, 28, p.27.
Chemical & Engineering News, **2011**, Vol 89, Dec 5th, p.8.
<http://cen.acs.org/articles/89/i49/SwitchFluorescence.html>
YouTube: <http://www.youtube.com/watch?v=FjipbGTf8w4>

Scientific Bodies

- Member of the Editorial Board of *Chinese Chemical Letters*, 2014.
- Management Committee delegate to COST action CM1005 (2011-2015):
Supramolecular Chemistry in Water.
- Chemistry panel reviewer for the Enterprise Ireland Basic Research grant scheme in
2001 and 2002.
- Chairman of the chemistry review panel for the Science Foundation Ireland Research
Frontiers grant scheme in 2004 and 2005.
- Member of the advisory committee to the Frontiers Engineering and Science
Directorate of Science Foundation Ireland, 2004 - 2005.
- Member of the American Chemical Society.