Grzegorz Soboń

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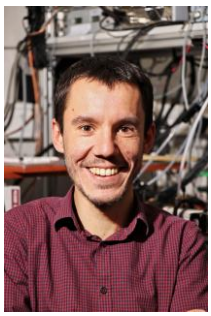

OBTAINED DEGREES

28.02.2018	Habilitation („*Broadband mid-infrared sources based on femtosecond fiber lasers*"), Wrocław University of Science and Technology Faculty of Electronics,
15. 07.2013	Wrocław University of Science and Technology, Faculty of Electronics Doctoral degree (Ph.D.) in Telecommunications/Optoelectronics Thesis: „*Fiber-based MOPA sources for generation and amplification of ultrashort laser pulses in the 3rd telecommunication window*" (supervisor: Prof. Krzysztof M. Abramski)
18.06.2010	Wrocław University of Science and Technology, Faculty of Electronics Master of Science (M.Sc.), Electronics and Telecommunications Thesis: „*Erbium-Ytterbium fiber amplifier with LMA active fiber*" (advisor: Dr. Paweł Kaczmarek)

EMPLOYMENT

09.2019 – present	Wrocław University of Science and Technology, Faculty of Electronics Position: associate professor, Group Leader – Optical Frequency Comb Spectroscopy Group
02.2014 – 08.2019	Wrocław University of Science and Technology, Faculty of Electronics Position: assistant professor
10.2016 – 04.2017	Umeå University, Department of Physics, Sweden Position: post-doc
11.2012 – 02.2014	Wrocław University of Technology, Faculty of Electronics Position: research assistant
11.2009 – 05.2011	Wrocław University of Technology, Faculty of Electronics Position: research technician

RESEARCH STAYS

10.2016 – 04.2017	Umeå University, Department of Physics, Umeå, Sweden Optical Frequency Comb Spectroscopy Group Supervision: Dr. Aleksandra Foltynowicz-Matyba
08.2009 – 09.2009	Military University of Technology, Warsaw, Poland Institute of Optoelectronics, Supervision: Dr. Jacek Świderski

PARTICIPATION IN RESEARCH PROJECTS

10.2018 – 09.2020	„*Dispersion-engineered fiber modules for tunable laser sources*", POIR.04.01.01-00-0037/17 (National Centre for Research and Development, NCBiR). Role: main contractor
05.2018 – 05.2021	„*Fiber-based mid-infrared frequency combs for laser spectroscopy and environmental monitoring*", First TEAM/2017-4/39 (Foundation for Polish Science, FNP). Role: **principal investigator**
10.2016 – 04.2019	„*Ultrashort-pulsed fiber amplifiers for the mid-infrared spectral range*" (Polish Ministry of Science and Higher Education, MNiSW). Role: **Principal Investigator**
10.2016 – 04.2017	„*Mid-infrared optical frequency comb spectroscopy*" (Knut och Alice Wallenbergs Stiftelse). Project carried out at Umeå University, Sweden. Role: co-investigator

02.2015 – 02.2018	*„Topological insulators as a new class of saturable absorbers for fiber lasers*" (National Science Centre, NCN). Role: main contractor
01.2015 – 01.2018	*„Synchronized mode-locked fiber lasers based on Thulium- and Erbium-doped active fibers as a source for mid-infrared optical combs generation*" (NCN). Role: co-investigator
07.2014 – 12.2017	*„Passive mode-locking in dispersion-managed ultrafast Thulium-doped fiber lasers*" (NCN). Role: **Principal Investigator**
07.2014 – 07.2017	*„Supercontinnum generation in near infrared range using birefringent all-normal dispersion silica microstructured fibers*" (NCN). Role: co-investigator
07.2014 – 07.2017	*„Parametric conversion of near-infrared radiation into mid-infrared in oxide multicomponent glass photonic crystal fibers with all-solid glass or suspended core lattices*" (NCN). Role: co-investigator. Project carried out at the Institute of Electronic Materials Technology, Warsaw (PI: Dr. Mariusz Klimczak)
12.2012 – 03.2016	*„Ultrafast graphene-based fiber lasers*" (National Centre for Research and Development, NCBiR). Role: main contractor.
07.2013 – 01.2016	*„Generation of mid-infrared radiation using novel dual-wavelength all-fiber laser sources*" (NCN). Role: main contractor
06.2013 – 06.2015	*„Investigation of saturable absorbers based on graphene oxide and reduced graphene oxide*" (MNiSW). Role: main contractor.
06.2013 – 02.2015	*„Amplification of femtosecond pulses from fiber lasers utilizing graphene*" (MNiSW). Role: **Principal Investigator**
08.2012 – 05.2015	*„Saturable absorption in atomic-layer graphene for ultrashort pulse generation in fiber lasers*" (NCN). Role: main contractor.
03.2011 – 03.2014	*„Fiber lasers and amplifiers*" (Wrocław Research Centre EIT+). Role: main contractor.
05.2010 – 04.2011	*„Developing novel laser-fiber monitoring technologies to prevent environmental hazards from vibrating objects*" (EEA Grants, Norwegian Financial Mechanism). Role: co-investigator.
11.2009 – 05.2011	*„Fiber Power Amplifiers for MOPA (Master Oscillator Power Amplifier) Configuration*" (NCBiR). Role: co-investigator.

PRIZES & AWARDS

15.11.2019	Wrocław University of Science and Technology Rector's stipend for scientific achievements
09.02.2015	Polish Prime Minister Award for the best PhD thesis in year 2013
26.11.2014	Polish Ministry of Science and Education Prize for outstanding achievements in fundamental sciences (shared with Prof. Krzysztof Abramski and Dr. Jarosław Sotor)
15.10.2014	Scholarship of the Polish Ministry of Science and Higher Education for outstanding young scientists (3-year scholarship)
31.05.2014	Scholarship for young scientists within the START programme funded by the Foundation for Polish Science (FNP)
23.05.2014	The ABB Prize, awarded by the Director of ABB Research Center (Kraków)
2014	Wrocław University of Technology Rector's award for outstanding scientific achievements
20.04.2013	Scholarship (with distinctions) for young scientists within the START programme funded by the Foundation for Polish Science (FNP)
29.01.2013	Scholarship of the Polish Ministry of Science and Higher Education for PhD students

05.11.2012	GRANT Plus scholarship, awarded by the Marshal of Lower Silesian district (funded by the European Union – European Social Fund)
19.11.2012 & 22.11.2011	Wrocław University of Technology Rector award for outstanding scientific achievements (awarded twice)

PLENARY AND INVITED LECTURES:

- OPTO-Meeting for Young Researchers, 23-27.07.2019, Toruń.
  Title: " *Ultracompact lasers emitting ultrashort pulses – from simple oscillators to mid-infrared optical frequency combs*"
- CLEO Pacific Rim / OECC / PGC 2017, 31.07 – 4.08.2017, Singapore
  Title: "*Ultrafast fiber lasers mode-locked with 2D nanomaterials*"
- 5th Polish Optical Conference (V Polska Konferencja Optyczna), 2-07.2017, Gniezno, Poland
  Title: "*Optyczne grzebienie częstotliwości w średniej podczerwieni i ich zastosowania w spektroskopii laserowej*" (EN: *„Mid-infrared optical frequency combs and their applications in laser spectroscopy*")
- 43rd Congress of Polish Physicists (43. Zjazd Fizyków Polskich), 6-11.09.2015, Kielce, Poland
  Title: "*Ultraszybkie lasery światłowodowe*" (EN: *„Ultrafast fiber lasers"*)
- OPTO-Meeting for Young Researchers, 27-30 May 2015, Wrocław, Poland.
  Title: "*Ultrafast fiber lasers using graphene and other two-dimensional materials*"
- III Symposium of the Photonics Society of Poland, 8-9 April 2015, Warsaw, Poland
  Title: "*Ultrafast fiber lasers based on graphene and other nanomaterials*"
- XIX Polish-Slovak-Czech Optical Conference, 8-12 September 2014, Wojanów, Poland
  Title: "*Ultrashort pulse generation in fiber lasers using graphene*"

INVITED PAPERS IN JOURNALS:

- G. Sobon, *„Mode-locking of fiber lasers using novel two-dimensional nanomaterials: graphene and topological insulators [Invited]*," Photonics Research 3, A56-A63 (2015)
- G. Sobon, J. Sotor, *„Recent Advances in Ultrafast Fiber Lasers Mode-locked with Graphene-based Saturable Absorbers*," Current Nanoscience 12(3), 1-7 (2016)

RESEARCH COOPERATION:

- Umeå University, Umeå, Sweden – group of Dr. Aleksandra Foltynowicz-Matyba. Development of mid-infrared frequency combs. Post-doc scholarship 2016/2017. Exchange of students and post-docs between our groups, joint publications
- KTH Royal Institute of Technology, Stockholm, Sweden (Robert Lindberg, Prof. Valdas Pasiskevicius) – femtosecond lasers, supercontinuum generation (joint publications)
- Université Université d'Angers, Laboratoire de Photonique d'Angers, Angers, France (Prof. François Sanchez). Common research project entitled *"Study of passively mode-locked fiber lasers*", in the frame of Polish-French collaboration (POLONIUM programme financed by the Polish Ministry of Science and Higher Education).
- Institute of Electronic Materials Technology (ITME) Warsaw, Poland
  Several common research projects realized in close collaboration with ITME: devoted to graphene-based fiber lasers (the groups of Dr. Włodek Strupiński and Dr. Ludwika Lipińska), and supercontinuum generation (Prof. Ryszard Buczyński and Dr. Mariusz Klimczak).
- Warsaw University of Technology, Warsaw, Poland
  Collaboration with Dr. Rafał Zybała (Faculty of Materials Science and Engineering) – research on ultrashort pulse generation using topological insulators. Also: Dr. Mariusz Zdrojek (Faculty of Physics) – research on carbon nanotubes as saturable absorbers for fiber lasers.
- Wrocław University of Science and Technology, Faculty of Fundamental Problems of Technology – collaboration with the group of Prof. Wacław Urbańczyk, Dr. Tadeusz Martynkien, Dr. Karol Tarnowski – supercontinuum generation in nonlinear silica fibers.
- AGH University of Science and Technology, Faculty of Materials Science and Ceramics Andrzej Mikuła, Krzysztof Mars – novel saturable absorbers based on 2D nanomaterials.
- Institute of Photonics and Electronics, The Czech Academy of Sciences, Prague (Czech Rep.) Collaboration with Dr. Pavel Peterka, research on Thulium- and Holmium-doped fiber lasers (application of Tm- and Ho-doped fibers developed at CAS for mode-locked fiber lasers).

SUPERVISION OF STUDENTS

Doctoral (main supervisor):
Dorota Tomaszewska, Olga Drożdżowska, Zbigniew Łaszczych
Doctoral (secondary supervisor):
Aleksander Głuszek, Jakub Bogusławski, Maciej Kowalczyk (as secondary supervisor)
Graduate:

Michał Porębski (Eng.), Klaudia Ficek (Eng.), Aleksandra Nowak (Eng.), Dorota Tomaszewska (Eng., MSc),Olga Drożdżowska (Eng., MSc), Sylwia Dudek (Eng.), Aleksander Głuszek (MSc)

PUBLICATION RECORD:

Papers in peer-reviewed JCR-indexed journals: **81**
Total citations (without self-citations): **2468** (Web of Science, 5.03.2020)
H-index: **29** (Web of Science, 5.03.2020)