

Researcher Links UK-Russia Workshop

Topic: Scientific and technical grounds of future low-carbon propulsion

Venue: Bio Science Centre Times Square, Scotswood Rd, Newcastle upon Tyne NE1 4EP

Day 1 (19th November 2018) - Bioresources and advanced biofuels for low-carbon propulsion.–This session will discuss the ways of maximizing biofuel-to-energy conversion efficiency, effect of biofuel properties and chemistry on low-carbon propulsion system performance.

08:30-9:00 Arrival and Registration				
09:00-09:30 Welcome/Introduction				
09:30-10:15 Keynote speakers -Prof Alexey Terenchenko and Prof Andrey Kozlov (FSUE NAMI)				
10:15-10:30 Break				
Session 1 (10:30-12:35)				
Time	Name	Institution	Presentation title	Contact details
10:30-10:55	Paolo Bombelli	University of Cambridge	Photosynthetic bio electrochemical systems - possible areas of application	pb346@cam.ac.uk
10:55-11:20	Iain Michie	University of South Wales	Modelling and operation of scalable tubular microbial electrochemical technologies for the enhanced reduction of CO ₂ to liquid fuels.	iain.michie@southwales.ac.uk
11:20-11:45	Nearchos Stylianidis	Jaguar Land Rover/Northumbria University	Reduced syngas-based chemical kinetics mechanisms for dual fuel engine combustion applications	nearchos.stylianidis@northumbria.ac.uk
11:45-12:10	Alla Silkina	University of Swansea	Algal biotechnology potential for the waste remediation	a.silkina@swansea.ac.uk
12:10-12:35	Junfeng Yang	University of Leeds	The Impact of Cold EGR on the Nitrogen Oxides Formation in a Diesel Engine Fuelled by Biodiesel	J.Yang@leeds.ac.uk
12:30-13:30 Lunch and Networking				
Session 2 (13:30-15:35)				
Time	Name	Institution	Presentation title	Contact details
13:30-13:55	Paul Hellier	University College London	Future sustainable fuels: Exploiting waste streams and reducing toxicity of combustion emissions	p.hellier@ucl.ac.uk
13:55-14:20	Anh Phan	Newcastle University	Biorefining of waste for energy, fuel and chemical production	anh.phan@ncl.ac.uk
14:20-14:45	Mikhail Kotelev	National University of Oil and Gas «Gubkin University»	Special aspects of production and practical use of 2-methyl- and 2,5-dimethylfuran as promising high-octane additives to gasoline	kain@inbox.ru
14:45-15:10	Chongming Wang	Coventry University	Minimization of emissions from diesel vehicles via hybridization and advanced exhaust after-treatment system	ac8174@coventry.ac.uk
15:10-15:35	Andrey Iakovenko	Moscow Automobile and Road Construction State Technical University (MADI)	The use of alternative fuels for reduction of IC engine structure-borne noise	iakovenko_home@mail.ru
15:35-16:30 Networking and mentoring				
16:30-17:00 Visit of Centre for Life				
17:00 Adjourn				
18:00-19:00 Dinner				

Day 2 (20th November 2018) Electrification in transport. – This session will cover topics on advanced battery technologies, electric machines, power electronics and fuel cells for low-carbon propulsion.

08:30-9:00 Arrival				
09:00-9:45 Keynote speaker -Prof Ghanim Putrus (Northumbria University)				
9:45-10:00 Break				
Session 1 (10:00-12:30)				
Time	Name	Institution	Presentation title	Contact details
10:00-10:25	Alexey Kolbasov	FSUE NAMI	The usage of photovoltaic converters as an additional source of energy for electric vehicles.	aleksey.kolbasov@nami.ru
10:25-10:50	Antonino La Rocca	University of Nottingham	Numerical and analytical thermo-mechanical modelling of electrical machines and power electronics for propulsion and power generation systems	a.larocca@nottingham.ac.uk
10:50-11:15	Oleg Chudakov	Bauman Moscow State Technical University	Hybrid minibus development	chudakov@bmstu.ru
11:15-11:40	Mahmoud Shahbazi	Durham University	Advanced power conversion for future propulsion systems	mahmoud.shahbazi@durham.ac.uk
11:40-12:05	Sergey Shadrin	Moscow Automobile and Road Construction State Technical University (MADI)	Energy Efficiency of Autonomous Vehicles on Hilly Roads	shadrin@madi.ru , dr.sergey.shadrin@gmail.com
12:05-12:30	Mousa Marzband	Northumbria University	Efficient Energy Management with Emphasis on electrical vehicles Charging/Discharging Strategy	mousa.marzband@northumbria.ac.uk
12:30-13:30 Lunch and Networking				
Session 2 (13:30-15:10)				
Time	Name	Institution	Presentation title	Contact details
13:30-13:55	Tatiana Osipova	Nizhny Novgorod Technical University	Process modeling of battery discharge	osipova@170rz.ru ; nntu@nntu.ru
13:55-14:20	Kurmaev Rinat	FSUE NAMI	Maintenance of the required temperature of a high-voltage battery for electric vehicles	rinat.kurmaev@nami.ru
14:20-14:45	Alexey Gorozhankin	South Ural Technical University	Methods of analysis and synthesis of traction drives of electric vehicles	andrey.keller@nami.ru
14:45-15:10	Shafiq Odhano	University of Nottingham	Torque Estimation in Traction Electric Drives	shafiq.odhano@nottingham.ac.uk
16:00-17:00 Visit of Sir Joseph Swan Centre for Energy Research, Newcastle University				
17:00 Adjourn				
18:00-19:00 Dinner				

Day 3 (21st November 2018) Waste energy recovery systems. - This session will cover topics on waste energy recovery from combustion of solid waste, waste heat recovery from internal combustion engines, regenerative braking systems and energy storage technologies.

08:30-9:00 Arrival				
09:00-9:45 Keynote speaker - Dr Cedric Rouaud (Ricardo)				

Session 1 (9:45-11:00)				
Time	Name	Institution	Presentation title	Contact details
9:45-10:10	Guohong Tian	University of Surrey	Waste heat recovery from IC engines	g.tian@surrey.ac.uk
10:10-10:35	Pankratov Sergei	Bauman Moscow State Technical University	Using of heat transfer intensification by dimples at heat recovery system	doctor@baumanracing.ru
11:00-11:10 Break				
Session 2 (11:10-12:25)				
Time	Name	Institution	Presentation title	Contact details
11:10-11:35	Artur Gimbitskii	Kazan National Research Technical University	Reducing heat waste from high temperature devise to the environment	garthur@yandex.ru
11:35-12:00	Sarah Odofin	University of Derby	Waste heat recovery for Power Generation	s.odofin@ac.uk sarahodofin@gmail.com
12:00-12:25	Vladimir Zubkov	University of Brighton	Mathematical modelling of heating and evaporation of spheroidal droplets in Diesel engine-like conditions	V.Zubkov@brighton.ac.uk
12:30-13:30 Lunch and Networking				
13:30-17:00 Visit of sightseeing destination and dinner				

Day 4 (22nd November 2018) Mathematical modeling of low-carbon propulsion systems. - This session will cover topics on mathematical modeling for maximizing the performance and efficiency of low-carbon propulsion systems.

08:30-9:00 Arrival				
09:00-09:45 Keynote speaker - Prof Alexey Burluka (Northumbria University)				
09:45-10:00 Break				
Session 1 (10:00-11:40)				
Time	Name	Institution	Presentation title	Contact details
10:00-10:25	Evgeniya Krasnova	Bauman Moscow State Technical University	Ecological parameters improvement in hydrogen diesel engine	Evikrasnova@gmail.com
10:25-10:50	Pavel Dushkin	Moscow Automobile and Road Construction State Technical University (MADI)	Experimental and numerical research of fuel injection system hydrodynamics effects in case of diesel and biofuel injection	levvap@gmail.com
10:50-11:15	Alexander Popov	South-Ural State University	Design and experimental studies of spark-ignition automobile engine when working on poor fuel-air mixtures	popovae@susu.ru
11:15-11:40	Vladimir Krasnov	FSUE NAMI	Local heat exchange in hydrogen diesel engine	Vikrasnov@gmail.com
11:40-12:25 Presentation from British Council				
12:25-13:25 Lunch and Networking				
Session 2 (13:25-14:40)				
Time	Name	Institution	Presentation title	Contact details
13:25-13:50	Ilya Kulikov	FSUE NAMI	Model analysis of electrically driven vehicles by means of unknown input observers	i.kulikov.mami@gmail.com

13:50-14:15	Andrei Zelentcov	Central Institute of Aviation Motors (CIAM)	Combustion Chamber Shaping for Increasing of Effective Parameters of Aviation Wankel Engine	zelentsov.aa@gmail.com
14:15-14:40	Eduard Savastenko	Moscow Automobile and Road Construction State Technical University (MADI)	Calculation Method of Characteristics of Gasoline Engine with Cylinder Shutdown	e.d.u.a.r.d@inbox.ru
15:00-16:30 Visit of Northumbria University, Faculty of Engineering and Environment				
16:30-17:00 Wrap-up/Workshop Summary				