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Welcome address

SENERES final results and future plans

Final SC meeting 29 August 2014

Welcome address

Welcome to the final, twelfth issue of the SENERES Newsletter. SENERES is the project founded within frames of FP7 Capacities RegPot Programme. The main objective of the SENERES project is to reinforce and develop research and demonstration potential of the Institute of Power Engineering (Poland) and to set up the **Sustainable Energy Research and Development Centre SENERES** focused on high efficient low-carbon energy technologies: energy generation from biomass, clean coal technologies and fuel cells.

The SENERES Newsletter is a source of periodical information about SENERES project activities. It disseminates results of SENERES Centre research work and the Centre's development. It also delivers the most important information about the development of research, events and possibilities of research funding in SENERES thematic area.



SENERES final results

WP1. Exchange of know-how and experience

Task 1.1. ECN, Petten, The Netherlands

Visits in IEn:

Dr Mariusz Cieplik, prof. Jaap Kiel, dr Christian van der Meijden, dr Lydia Fryda, dr Rian Visser, dr Jan Pels, dr Luc Rabaou, dr Paul de Wild

Visits in ECN:

Janina Ilmurzyńska, Ewa Marek, Krzysztof Strug, dr Paweł Bocian, dr Jakub Kupecki

Task 1.2. TU Delft, The Netherlands

Visits in IEn:

Dr P.V. Aravind, Theo Woudstra, Botta Giulia, Fan Liyuan, Fernandes Alvaro, Liu Ming, Eva Promes, Tabish Asif Nadeem, Thallam Thattai Aditya,

Visits in TU Delft:

Dr Jakub Kupecki, dr Agnieszka Jakubiak, dr Janusz Jewulski, dr Michał Struzik, Marek Stefański, Katarzyna Wawryniuk, Marcin Blesznowski



Task 1.3. Cambridge University, UK

Visits in IEn:

Prof. Bartłomiej Głowacki, Rumen Tomov, Simon Hopkins, dr Vasilka Tsaneva

Visits in Cambridge

Dr Mariusz Krauz, Szymon Obrębowski, Agnieszka Szudarska

Task 1.4. CIRCE, Zaragoza, Spain

Visits in IEn:

Dr Luis M. Romero, MSc Eng. Pilar Lisbona, dr Luis I. Diez, S. Espatolero

Visits in CIRCE:

Krzysztof Jagiełło, Maria Kaska, dr Aneta Świercz



Task 1.5. KTH, Stockholm, Sweden

Visits in IEn:

Prof. Włodzimierz Błasiak, prof. Weihong Yang, Mohsen Saffari Pour, Karthik Ramakrishnan, Mersedeh Ghadamgahi, Abdul Hye, Pelle Mellin, Chunguang Zhou, Duleeka Sandamali Gunarathne

Visits in KTH:

Karol Białobłocki, dr Andrzej Sławiński



Task 1.6. IFK, Stuttgart, Germany

Visits in IEn:

Dipl.-Ing. Jörg Maier, Gosia Sten-Brzozowska, Collins Ndibe

Visits in IFK

Dr Robert Lewtak, Beata Glot, dr Aleksandra Milewska, dr Jarosław Hercog, dr Paweł Bocian, Grzegorz Nehring

Task 1.7. CNR-ISTEC, Faenza, Italy

Visits in IEn:

Dr Carmen Galassi, David Gardini,

Visits in CIRCE:

Dr Magdalena Gromada, Agata Tłuczek, dr Ryszard Kluczkowski, Michał Kawalec



WP2. Recruitment of incoming experienced researchers

Dr Marcin Siedlecki,
TU Delft, The Netherlands

Dr Izabela Stefanowicz-Pięta,
University of Waterloo, Canada

Jan Pieter Ouweltjes,
ECN, The Netherlands

Dr Piotr Płaza,
TU Delft, The Netherlands

Dr Rui Antunez,
Instituto Politécnico de Setúbal, Portugal



WP3. Acquisition, development, maintenance and upgrading of research equipment

Modernization of infrastructure and purchase of special equipment for opening new opportunities for experimental research:

1. Black Body Calibration System
2. Elliptical Radiometer → not purchased (purchased in another project)
3. Installation for biomass preparing
4. Digital coal ash fusibility (fusion) furnace
5. Elemental analyzer for Oxygen content in fuel samples
6. Moisture analyzer
7. TGA analyzer
8. FID analyzer → not purchased (purchased in another project)
9. Analyser ULTRAMAT 23 Siemens
10. Titalab
11. Installation for testing LPG burners
12. Porosimetry
13. High dynamic range photo camera
14. NI Developer Suite
15. High performance computer cluster
16. Matlab with toolbox
17. Laser cutting system
18. Electrochemical impedance spectroscopy system
19. Installation for measuring of the waste-gases purity

WP4. Workshops, seminars and participation in conferences

Task 4.1. Organization of 3 thematic workshops and 6 scientific seminars to facilitate knowledge transfer on national, regional and European level



Workshops

15-16.05.2012 - Energy generation from biomass and clean coal technologies – combustion and gasification problems (45 participants)

13-14.05.2013 - Clean coal technologies with CO2 capture – gasification and oxy-combustion technologies (40 participants)

2.06.2014 - 3rd International Symposium on Solid Oxide Fuel Cells for Next Generation Power Plants: Gasifier - SOFC systems (100 participants)



Seminars

1st Seminar
Enabling Technologies for Superconductivity Applications: Hydrogen technologies, Publications and Patents
27th of July 2012

2nd Seminar
Reduction of CO2 and NOx emission in energy generation from biomass and coal”
11th of July 2013

3rd Seminar
Materials, processes and fuels for Solid Oxide Fuel Cells
6th of February 2013

4th Seminar
SOFC optimisation and small CHP installations on the basis of SOFC
30th of October 2013

5th Seminar
Biomass, clean coal technologies and SOFC – next steps in technologies development
27th of January 2014

6th Seminar
Biomass gasification – the use of low calorific gas
12-13th of May 2014

Task 4.2. Participation of the SENERES’s research staff in international conferences and short training events

6th International Conference on Application of Biomass Gasification
29-31.03.2012
Germany, Stuttgart

37th International Technical Conference on Clean Coal and Fuel Systems
3-7.06.2012
USA, Clearwater

9th European Conference in Coal Research and its applications
9-13.09.2012
UK, Nottingham

International seminar on gasification
17-19.10.2012
Sweden, Stockholm

17th IFRF Member Conference (International Flame Research Foundation)
10-14.06.2012
France, Maffliers

FDFC 2013 Conference
16-18.04.2013
Germany, Karlsruhe

Introduction to gROMOS / Optimisation and Model Validation with gPROMS
24.02-02.03.2013
UK, London

SOFC advanced training workshop
30.04-04.05.2013
Netherlands
Petten, Eindhoven

Fuel Cell Seminar and Exposition 2013
20.10-24.10.2013
USA, Columbus, OH

Piero Lunghi Conference and Exhibition EFC 2013
9-13.12.2013
Italy, Rome

US National Combustion Meeting
19-22.05.2013
USA, Park City (UT)

European Biomass Conference and Exhibition 2013
3-7.06.2013
Denmark, Copenhagen

International Seminar on Gasification
16-18.10.2013
Sweden, Malmo

Energy sector in Poland - potential and cooperation possibilities
8-10.12.2013
Turkey, Ankara

Fuel Cells 2014 Science and Technology
2-5.04.2014
Netherlands, Amsterdam

8th Symposium on Group Five Compounds
24-27.06.2014
Spain, Malaga

Nordic Biogas Conference 2014
28-30.08.2014
Iceland, Reykjavík

NI Week 2014
4-7.08.2014
USA, Austin

Task 4.3. Organisation of an intensive course/specific training on protection and management of Intellectual Property in the field of energy generation from biomass, clean coal technologies and fuel cells

2-3.04.2012 - SENERES training on protection and management of Intellectual Property in the field of new energy technologies



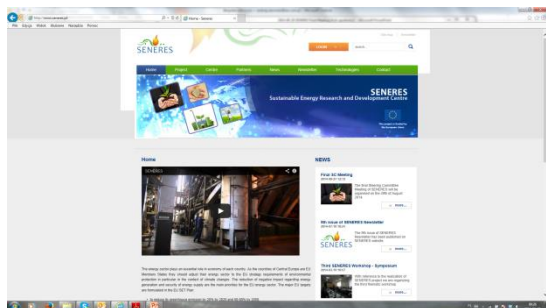
5.06.2013 - IP protection and management in energy research – commercialisation processes in IEn



WP5. Dissemination and promotional activities

Task 5.1. The project SENERES website establishment and development

<http://www.seneres.pl>



Task 5.2. Dissemination of SENERES's Newsletter)

12 SENERES Newsletters have been published



Task 5.3. Other communication activities

SENERES's leaflet and poster

Factual video (available on the project website and on CDs)

Many scientific publications

Presentation of the project scientific results on international conferences

Presentation of the project on the international events for instance

4-5 June 2012, Cracow, WIRE2012

12-13 December 2012, Kaunas (Lithuania), FP7 Energy Training

7-8 May 2013, Dublin (Ireland), SET Plan Conference

12-13.06.2014, WIRE Conference 2014, Athens, Greece