

# Awarding Ceremony



**ACNS'2015**

**CSYS'2015**

Saint-Petersburg, Russia  
June 29 – July 3, 2015



**CSYS'2015**

Saint-Petersburg, July 1, 2015

# **The Fourth Conference-School of Young Scientists (CSYS'2015) “ADVANCED CARBON NANOSTRUCTURES AND METHODS OF THEIR DIAGNOSTIC”**

**CSYS'2015** follows the tradition of previous Conference-Schools, held during “Fullerenes and Atomic Clusters” (IWFACT'2009) and “Advanced Carbon Nanostructures” (ACN'2011 and ACNS'2013) conferences.

**Organizers:** *Ioffe Institute, St.Petersburg, Russia*  
*National Research Center "Kurchatov Institute", Moscow, Russia*



## **Official Partners:**

*Russian Foundation for Basic Research*  
*Government of Saint-Petersburg*  
*Fund for Infrastructure and Educational Programs*  
*Dmitry Zimin Dynasty Foundation*



**Participants:** 82 participants from 10 countries.

**The Program includes:** 6 invited talks, 15 presentations from young scientists, and 6 presentations on analogs of carbon nanostructures in a non carbon world.

*The best report of young scientists is traditional honored  
with a certificate of merit.*

# **Short presentations of young scientists award**

# ***Honorable mention prize***



**CSYS'2015**

**Saint-Petersburg, July 1, 2015**

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**Synthesis and study of «detonation  
nanodiamond-pyrophosphatase»  
hybrid systems**

A.V. Valueva, R.Yu. Yakovlev

*Under the direction of  
Prof Dr N.B. Leonidov and PhD E.V. Rodina*



**Pavlov  
Ryazan State  
Medical  
University**



**ACNS'2015, Saint Petersburg**



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# Electron-microscopy imaging of carbon nanotubes

N.A. Vysochanskiy, G.E. Fedorov and A.G. Domantovski

National Research Center "Kurchatov Institute", Moscow, Russia,  
Moscow Institute of Physics and Technology (State University), Dolgoprudny, Russia



НАЦИОНАЛЬНЫЙ  
ИССЛЕДОВАТЕЛЬСКИЙ ЦЕНТР  
"КУРЧАТОВСКИЙ  
ИНСТИТУТ"



anced Carbon  
ment Methods



# ID:93

Spin- and angle-resolved photoelectron spectroscopy as the method for investigation of the electronic and spin structure of graphene

A.A. Rybkina, A.G. Rybkin, I.I. Klimovskikh,  
M.V. Filianina, D.A. Pudikov, E.V. Zhizhin, A.M. Shikin

St. Petersburg State University, St. Petersburg, Russia



**Saint-Petersburg  
State University**



German-Russian  
Interdisciplinary  
Science Center



**HELMHOLTZ  
ZENTRUM BERLIN**  
für Materialien und Energie



Advanced Carbon

# Short presentations of young scientists award

## *Winners of the award*



**CSYS'2015**

**Saint-Petersburg, July 1, 2015**

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# **Optimization of multitip field emitters with fullerene protecting coatings**

**E.P. Taradaev**

under the direction of

**Prof. G.G. Sominski**



**Peter the Great St.Petersburg Polytechnic  
University**



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**The production of polymer  
nanocomposites modified with carbon  
nanotubes and nonionic surfactants**

**A.R. Gataoullin**

under the direction of

**Prof. S.A. Bogdanova**



*Kazan National Research  
Technological University,  
Kazan, Russia*

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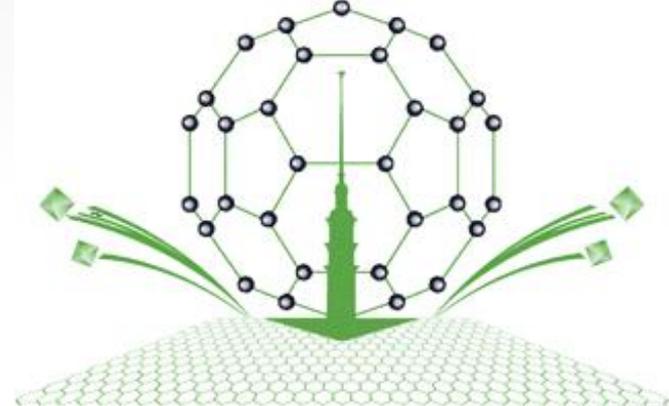
The Fourth  
Conference-School  
for Young Scientists

Advanced Carbon  
Nanostructures and Methods  
of Their Diagnostics

July 01, 2015  
St. Petersburg, Russia

# ACNS'2015

## Roger Taylor Award



**The  
British Carbon Group**



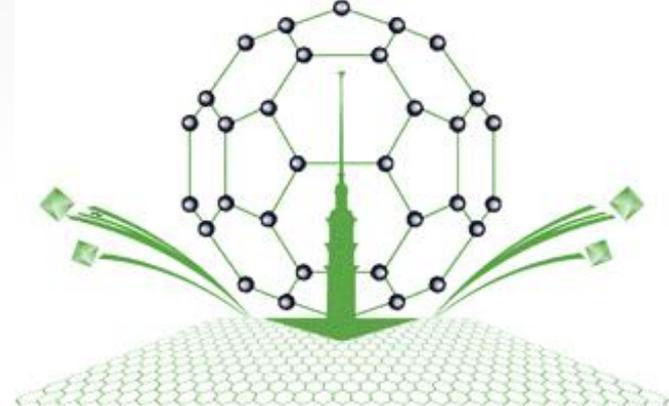
**Emeritus Professor  
Roger Taylor (1935-2006)**

The British Carbon Group is pleased to announce The Roger Taylor 2015 Award in memory of the distinguished scientist Professor Roger Taylor (1935 – 2006), Emeritus Professor of Chemistry at the University of Sussex.

The award is intended as a travel grant for students and early career researchers with up to ten years postdoctoral experience to attend an important international meeting for the advancement of fullerene and related science such as the functionalisation of carbon materials such as CNT and graphene. As Professor Taylor was a keen participant, preference will be given to a scientist to attend and present at the series of biennial conferences organized by Professor Vul and colleagues in St Petersburg, formerly known as IW FAC (International Workshop on Fullerenes and Atomic Clusters), now operating as "Advanced Carbon Nanostructures" organized by the Ioffe Institute or a meeting organized by the Electrochemical Society.

# ACNS'2015

## Roger Taylor Award Winner



# *Dr. Mandana Amiri,*

Department of Chemistry, University of  
Mohaghegh Ardabili, Ardabil, Iran



## Graphitic $C_3N_4$ Nanosheets for Electrochemical Sensing of Hg(II)



Mandana Amiri\*, Haniyeh Salehnia, Aziz Habibi-Yengjeh

Department of Chemistry, University of Mohaghegh Ardabili, Ardabil, Iran  
Email: [mandanaamiri@uma.ac.ir](mailto:mandanaamiri@uma.ac.ir)

... (text partially obscured) ...

**Experiment**

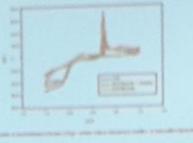
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**Characterization of  $\alpha\text{-C}_3\text{N}_5$**

**Spectroscopic Results:** The broad absorption band at 220-230 nm is attributed to the presence of  $\pi\text{-}\pi^*$  transitions. The band at 300 nm is related to the presence of the nitrogen impurities. The broad absorption band at 220-230 nm is due to the presence of  $\pi\text{-}\pi^*$  or  $\pi\text{-}\pi^*$  groups in the carbon sites of  $\alpha\text{-C}_3\text{N}_5$ .

**Results and Discussion**

... (text partially obscured) ...



The work will be presented today (July,1) on poster session.  
We welcome you to poster number P4-01.

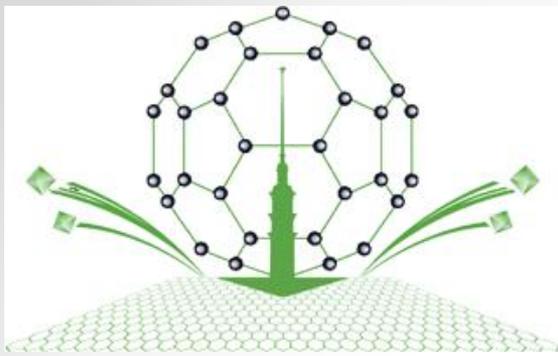


# ACNS'2015

12th International Conference  
Advanced Carbon NanoStructures

## CLOSING



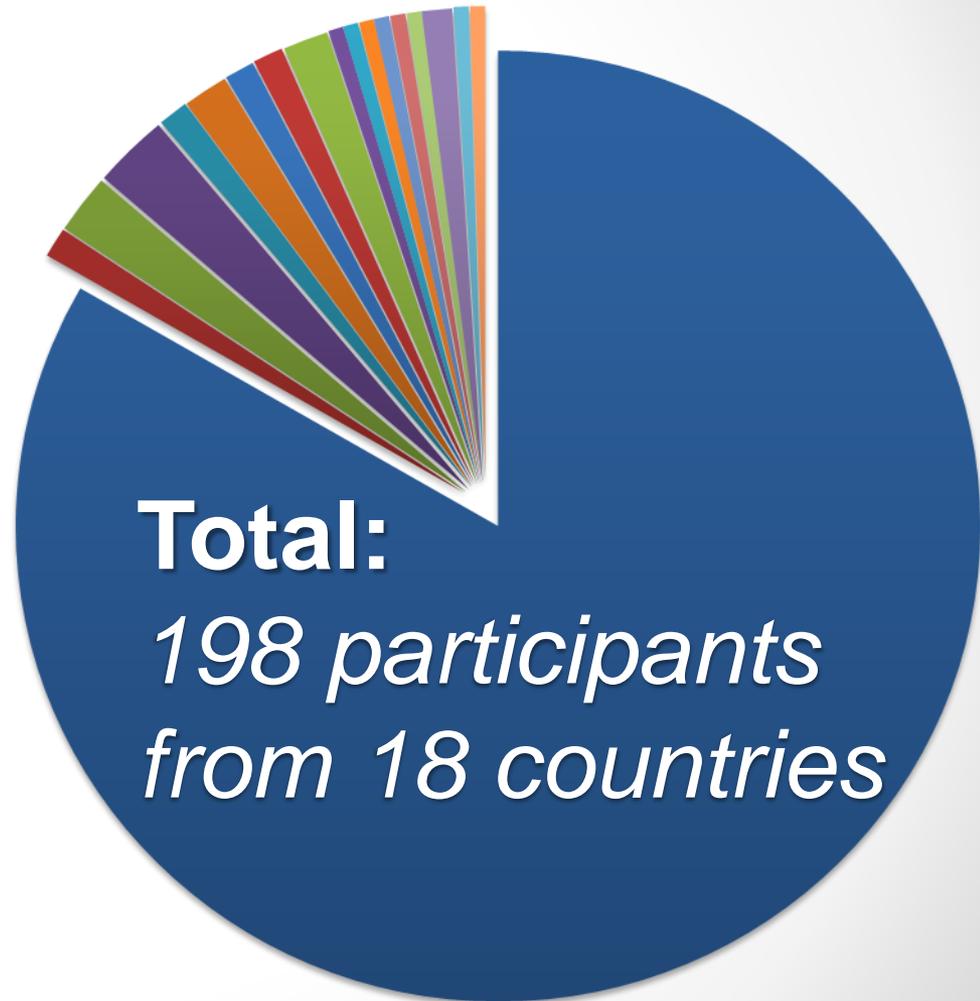


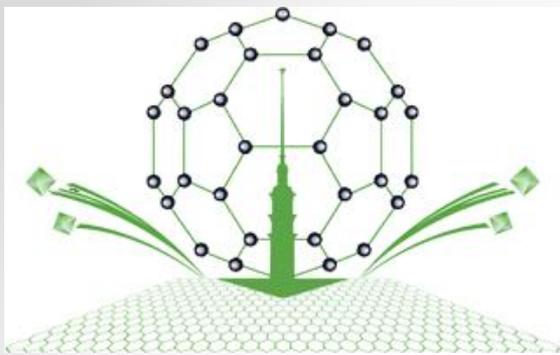
# ACNS'2015

Saint-Petersburg, Russia  
June 29 – July 3, 2015

## Countries: *number of participants*

Russia - 165	Ukraine - 2
China - 4	France - 5
Belarus - 2	Germany - 3
Iran - 2	Italy - 2
Japan - 3	Kazachstan - 1
USA - 1	Australia - 1
Brazil - 1	Finland - 1
Israel - 1	Mexico - 2
Spain - 1	United Kingdom - 1





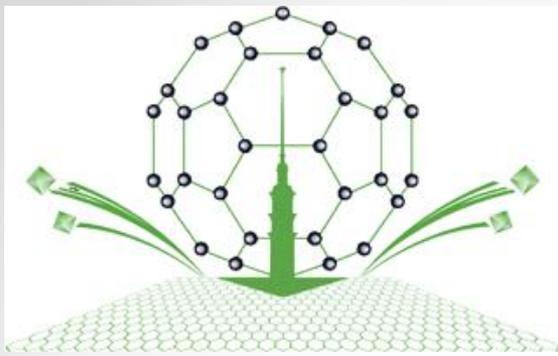
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# ***Distribution of subjects***



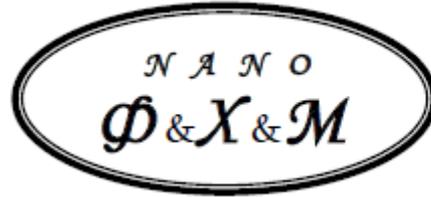
- Carbon Nanotubes
- Graphene & related materials
- Nanodiamond particles
- Other Nanocarbons
- Round Table: Theory and modelling
- Round Table: Technical applications of nanocarbons
- Analogs of carbon nanostructures in a non-carbon world



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***Proceedings***

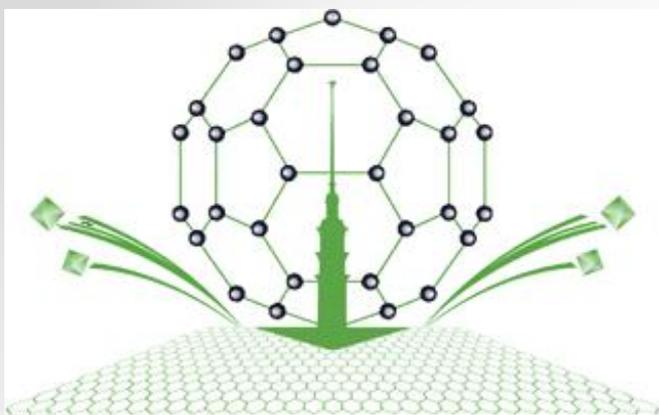


***NANOSYSTEMS:***

*PHYSICS, CHEMISTRY, MATHEMATICS*

**Conference proceedings  
contain over 40 papers**

Proceedings will be published in the journal  
“Nanosystems: Physics, Chemistry, Mathematics”  
(NANO. F&H&M) **at the beginning of 2016.**



# 12th International Conference Advanced Carbon NanoStructures

## ACNS'2015

Saint-Petersburg, Russia

June 29 – July 3, 2015

### **Organizers**

- Ioffe Physical-Technical Institute, St.Petersburg, Russia
- B.P.Konstantinov Petersburg Nuclear Physics Institute, Russia
- National Research Centre "Kurchatov Institute", Moscow, Russia
- St. Petersburg State Institute of Technology (Technical University), Russia

### **Official Partners**



- Russian Foundation for Basic Research



- Fund for Infrastructure and Educational Programs



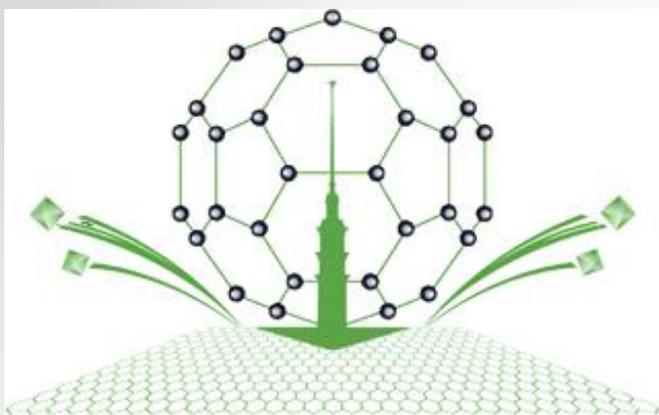
- Government of Saint-Petersburg



- Dmitry Zimin Foundation "Dynasty"



- Chemical Abstracts Service



12th International Conference  
Advanced Carbon NanoStructures

# ACNS'2015

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**R. Kalish** - Israel Institute of Technology, Technion, Israel

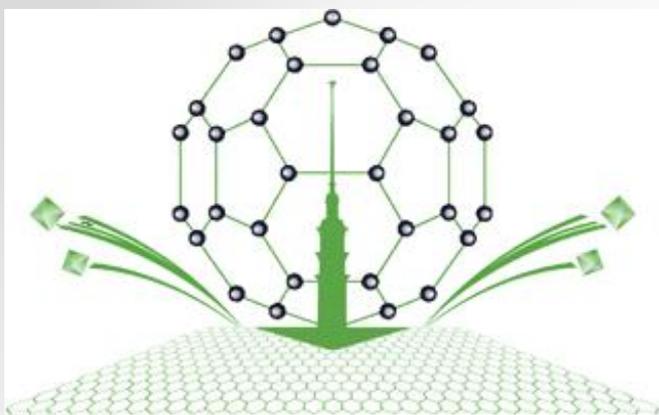
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# 12th International Conference Advanced Carbon NanoStructures

## ACNS'2015

Saint-Petersburg, Russia

June 29 – July 3, 2015

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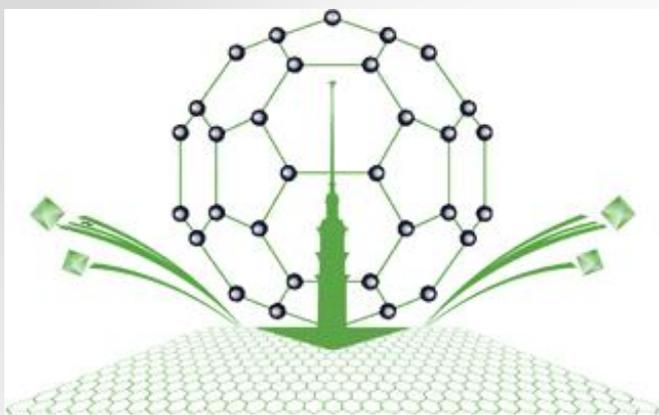
**A.M. Shikin** - St. Petersburg State University, Russia

**V.I. Sokolov** - Institute of Organoelement Compounds, Moscow, Russia

**V.M. Titov** - Institute of Hydrodynamics, Novosibirsk, Russia

**A.P. Vozniakovskii** - Federal State Unitary Enterprise Scientific Research Institute for Synthetic Rubber

**A.Ya. Vul'** - Ioffe Institute, St. Petersburg, Russia



# 12th International Conference Advanced Carbon NanoStructures

## **ACNS'2015**

**Saint-Petersburg, Russia**

**June 29 – July 3, 2015**

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**B.B. Chaivanov** - National Research Center "Kurchatov Institute", Russia

**V.F. Ezhov** - St Petersburg Nuclear Physics Institute, Russia

**A.V. Kirillin** - Russian Foundation for Basic Research, Russia

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**V.V. Kveder** - Institute of Solid State Physics, Chernogolovka, Russia

**V.T. Lebedev** - National Research Centre "Kurchatov Institute", B.P.Konstantinov  
Saint Petersburg Nuclear Physics Institute, Russia

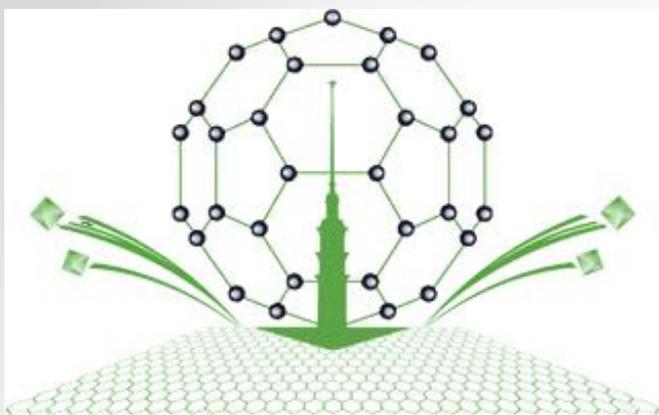
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**M.Yu. Romanovsky** - Department of General Physics, Russian Academy of Science

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12th International Conference  
Advanced Carbon NanoStructures

# ACNS'2015

Saint-Petersburg, Russia

June 29 – July 3, 2015

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***T.P. Kazantseva, B.M. Silin, L.V. Sharonova, M.V. Vorontsova, L.A. Zaitseva, E.A. Vorobyova, N.A. Dobryakova***, students and PhD students of  
“Physics for Cluster Structures” laboratory



**Technical Group, Ioffe Institute, Russia**

***D.B. Shustov, A.N. Trofimov, K.N. Orekhova*** and staff of  
Saint Petersburg Academic University



in association with Agency for Science and Technology "Intellect"

# The Organizing Committee

**thanks all invited  
speakers, lecturers,  
participants, sponsors  
and technical team**

**ACNS'2015**  
**CSYS'2015**

Saint-Petersburg, Russia  
June 29 – July 3, 2015



# ACNS'2017

13th International Conference  
Advanced Carbon NanoStructures



**WELCOME!**

**Saint-Petersburg, Russia**  
**June– July, 2017**