

**The International School-Seminar
“PHOTONICS OF NANO-AND BIOSTRUCTURES”**



PROGRAM



**June, 19-20
2015
Vladivostok**

The meeting is organized by

Institute of Automation and Control Processes (Far Eastern Branch of RAS)

Far Eastern Federal University, Vladivostok (FEFU)

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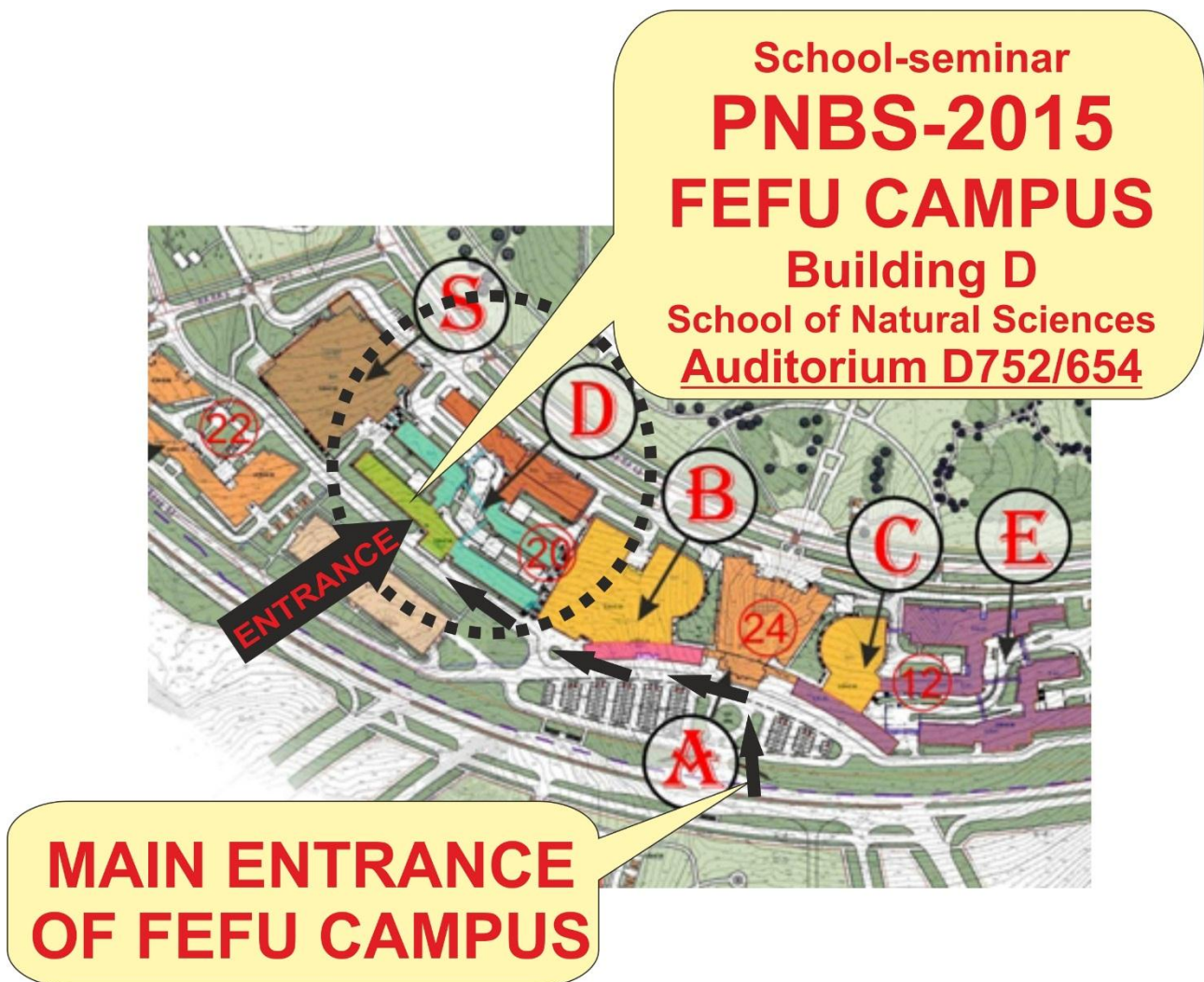
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Location

**Vladivostok, Far Eastern Federal University Campus,
Building D, School of Natural Sciences, Auditorium
D752/654**

Location scheme



PROGRAM

The International School-Seminar “PHOTONICS OF NANO-AND BIOSTRUCTURES”

**Vladivostok, Russia
19-20 JUNE 2015**

June 19, Friday
FEFU Campus, Room D752 / 654

09:30 - 10:00 Registration for the School-Seminar.

Opening of School.

10:00 - 10:15 Keynote speech. Chair of the School, Academician, Director of the IACP, Y.N. Kulchin.

Section 1. Plenary lectures.

Chairman - Academician Yu Kulchin.

10:15 - 10:55	"Modern technologies of additive manufacturing" <u>V.Ya. Panchenko</u> , academician, chairman of Russian Federal Property Fund, Institute of Laser and Information Technologies, Moscow..	L_01
10:55 - 11:35	"Synchrotron radiation and its possibilities" <u>V.V. Kvardakov</u> , Corresponding Member of the Russian Academy of Sciences, National Research Centre "Kurchatov Institute", Moscow.	L_02

11:35 - 12:00 Coffee-break.

Section 2. Nano- and Biophotonics

Chairman: Dr., Prof. RV Romashko.

12:00 - 12:15	“Laser fabrication of plasmon nanostructures Y. N Kulchin, OB Vitrik, AA Kuchmizhak young Ph.D., researcher IACP, Vladivostok.	O_01
12:15 - 12:30	"Nonlinear-optical properties of new nanocomposite materials BASED biosilicates and polymers." A.Y. Mayor, D.Y. Proshchenko , a graduate student, junior researcher IACP, Vladivosotk	O_02
12:30 - 12:45	"Laser-induced modification of the optical properties of silicate nanocomposites" Y.N. Kulchin, S.S. Voznesensky, A.A. Sergeev , a graduate student, junior researcher IACP, Vladivostok.	O_03
12:45 - 13:00	"Low-threshold Nonlinear optical metamaterials. Transmission, reflection, absorption " V. P. Dziuba, A.V. Amosov, D.V. Storozhenko , a young Ph.D., junior researcher IACP, Vladivostok.	O_04

13.00 - 14.00 Lunch.

Section 3. Semiconductor nano- and microstructures.

Chairman Dr., Prof. O.T. Kamenev.

14:00 - 14:15	"Laser-induced modification process optical properties polymethylmethacrylate doped with boron difluoride ANTRATSENOILATSETONATOM". Y.N. Kulchin, O.B. Vitrik, A.Y. Zhizhchenko , a graduate student, junior researcher IACP, Vladivostok.	O_05
14:15 - 14:30	"Multichannel systems measuring the mass of an adaptive interferometer" R.V. Romashko, T.A. Efimov, PhD student, junior researcher IACP, Vladivostok.	O_06
14:30 - 14:45	«ДИНАМИКА СПЕКТРОВ ЛАЗЕРНО-ИНДУЦИРОВАННОЙ ФЛУОРЕСЦЕНЦИИ ХЛОРОФИЛЛА-А ФИТОПЛАНКТОНА В	O_07

	УСЛОВИЯХ МЕНЯЮЩИХСЯ ПАРАМЕТРОВ ВНЕШНЕЙ СРЕДЫ» S.S. Voznesenskiy, Е.Л. Гамаюнов, <u>А.Ю. Попик</u> , PhD student, jr. researcher. IACP, Vladivostok	
14:45 - 15:00	«ИЗМЕРЕНИЕ ПОКАЗАТЕЛЯ ПРЕЛОМЛЕНИЯ С ПОМОЩЬЮ ЛАЗЕРНОГО ПРОФИЛОМЕТРА» R.V. Romashko, О.Т. Каманев, <u>V.A. Kolchinskiy</u> , PhD student, jr. researcher. IACP, Vladivostok	O_08

15:00 - 17:00 Poster section

Poster section

«THEORETICAL STUDY OF ATYPICAL LOW THRESHOLD OPTICAL NONLINEARITY OF DIELECTRIC NANOPARTICLES» Y.N. Kulchin, V.P. Dzyuba, D.V. Storozhenko, <u>A.V. Amosov</u> , PhD student, IACP, Vladivostok.	P_01
«STUDY OF THERMAL RELAXATION LIVING TISSUE BY OPTICAL IMAGING BLOOD PULSATION» R.V. Romashko, N.P. Podolyan, <u>A.V. Belaventseva</u> , student, FEFU, Vladivostok.	P_02
«MODULE FOR THE LOCAL IMPACT OF BLOOD OPTICAL IMAGING PULSATIONS» R.V. Romashko, N.P. Podolyan, <u>N.A. Golubkin</u> , IACP, Vladivostok.	P_03
«DIAGNOSTIC TECHNOLOGY AND SYSTEM RECOVERY DIODE-PUMPED SOLID-STATE LASERS» R.V. Romashko, <u>A.A. Penigin</u> , student, FEFU, Vladivostok.	P_04
«DEVELOPMENT OF LABORATORY MODEL ADAPTIVE FIBER OPTIC INCLINOMETER» O.B. Vitrik, A.V. Dyshlyuk, <u>E.V. Mitsay</u> , student, FEFU, Vladivostok.	P_05
«LAYOUT LASER LIGHT CONTROL DEVICE» N.N. Nomokonova, A.A. Sergeev, <u>N.S. Evgenov</u> , student, VSUES, Vladivostok.	P_06
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June 20, Saturday
FEFU Campus, Room D752 / 654

Lectures

09:00 - 09:30	“Of fiber-optic sensor for detecting seismic acoustic signals” Y.N. Kulchin, Yu Petrov, A.V. Khizhnyak, O.T. Kamenev, Dr., Professor, IACP, Vladivostok.	L_03
09:30 - 10:00	“Laser-induced optical nanoantenna in the spectral Optical near-field microscope” Y.N. Kulchin, A.A. Kuchmizhak, O.B. Vitrik, Dr., Professor, IACP, Vladivostok.	L_04
10:00 - 10:30	«HIGH QUALITY FACTOR MICROCAVITY LASER WITH UNIDIRECTIONAL EMISSION» Chil-Min Kim (Department of Emerging Materials Science, Daegu Gyeongbuk Institute of Science and Technology (DGIST), Korea)	L_05

10:30 - 10:50 Coffee-break.

10:50 – 13:00	<p>Round table with participation of Academician Yu Kulchin.</p> <ul style="list-style-type: none"> • Nonlinear optical materials • Nanometrology and optical measurement system
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13:00 - 14:30 Visit laboratories IACP

14:30 - 14:45 School Closing