

<p style="text-align: center;">Area of study 28.04.01 «Nanotechnologies and Microsystems Engineering» Program: New Materials and Technology of Nanosystems</p> <p>Degree: master Program length and study mode: 2020 – 2022, full-time Language: Russian Credits: 120 Start date: 01.09.2020 Location: Taganrog, Institute of Nanotechnologies, Electronics and Equipment Engineering</p> <p>Entry requirements: - The citizens of the Russian Federation and foreign citizens with higher professional education (bachelor's degree, specialist diploma) are accepted for training. - Entrance tests are conducted in the form of an exam according to the approved program based on requirements established by the Southern Federal University. The minimum number of points required to participate in the competition is 50.</p>	<p style="text-align: center;">Program overview:</p> <p>Program structure: Unit 1 - Disciplines (modules): Mandatory part Unit 2 – Practical training: Mandatory part Unit 3 - State final certification: Final State Examinations and Graduation Thesis defense.</p> <p>Typical units of study may include: - Physics and technology of low-dimensional systems - Probe nanotechnology; - Plasma processes of nanotechnology; - Lasers in nanotechnology; - Specialized nanoscale integrated circuits.</p> <p>Research areas: Projects: - Development and creation of energy-efficient sensitive elements of gas sensors based on carbon nanostructures; - Study of the of laws of carbon nanotubes parameters influence on their adhesive properties for creating high-strength mechanical contacts; - Creation of memory devices using controlled deformations in vertically aligned carbon nanotubes;</p>	<p>Careers: «GS Nanotech» (Gusev), JSC "RPC "Istok" named after Shokin" (Fryazino), Joint Stock Company “Scientific Design Bureau of Computing Systems” (Taganrog), NKB modeling and control systems (Taganrog), Rostov Research Institute of Radio Communications (Rostov-on-Don), Kurchatov Center for Nuclear Technology (Moscow region), NPP KP "Quantum" (Rosctov-on-Don), Research institute them. Berga (Moscow), Svetlana OJSC (St. Peterburg), JSC Radio engineering corporation "Vega" (Moscow), SMA company (Moscow), SemiTEq JSC (St. Peterburg), NT-MDT Spectrum Instruments (Moscow), Orsay Physics (France), IBM (Switzerland).</p> <p>Get in touch: - <i>Il'in Oleg Igorevich</i> - <i>PhD</i> - +78634371940 - <i>oilin@sfedu.ru</i> - <i>ResearcherID: E-6098-2014; Scopus Author ID: 55060609700</i></p>
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- Creation of epitaxial heterostructures with regular arrays of self-organizing A3B5 nanostructures;

Laboratories:

- REC "Nanotechnology" SFedU:
- Laboratory of cluster nanotechnology.
- Laboratory of plasma nanotechnology.
- Laboratory probe nanotechnology.
- Laboratory of electron and ion beams nanotechnology.

