

NEWSLETTER

WWW.SKOLKOVOTECH.RU

Skolkovo | Russia
June 7, 2012

Skolkovo Tech

Skolkovo Institute of Science and Technology

Table of Contents

Education@SkTech	2
Faculty@SkTech	4
Innovation@SkTech	5
Research@SkTech	6
Leadership@SkTech	7



Edward F. Crawley
President
Skolkovo Institute of
Science and Technology

Dear Friends and Colleagues,

Amazing things have happened in the last weeks - the Skolkovo Tech family has expanded with new, excited and passionate members. Every day we are feeling more like a university!

Here is some of what we have accomplished in April and May:

- 21 outstanding students are set to enter the founding class after attending the first-ever Student Selection Weekend.
- The first permanent faculty interviews have begun.
- Six new Founding Faculty Fellows have joined our ranks, bringing with them extensive knowledge in fields ranging from biosensors to managing R&D investments.
- We have hit another milestone in the development of our research centers as 13 research groups advanced to the final selection round.
- The Center for Entrepreneurship and Innovation is selecting five research groups who will receive innovation support.
- An Industrial Cooperation and Governmental Relations office has been formed around recently hired Alexey Ponomarev to liaise with Russia's corporations and public institutions.
- We have signed an agreement with the Moscow Institute of Physics and Technology, so that upon graduation, Skolkovo Tech students will receive diplomas from both outstanding institutions.

In the coming weeks, we will select the first permanent faculty member, host the second Research Center Proposers Conference and continue recruiting the world's leading experts to craft this unique university around the triple helix model of integrated teaching, research and innovation.

We encourage you to share in the passion and excitement that is emerging from building a world-class university from the ground up.

Edward F. Crawley
President

Education@SkTech

Student Selection Weekend 2012

On May 11-13, Skolkovo Tech made a significant step on its way to becoming a world-class university by hosting its first-ever Student Selection Weekend 2012 at Skolkovo outside of Moscow, Russia.



A banner designed by students at the Student Selection Weekend 2012.

For more information about Skolkovo Tech students and admissions, please contact Bram Caplan, Director of Students at caplan@skolkovotech.ru or visit the student application website <http://apply.skolkovotech.ru>.

The inaugural class at Skolkovo Tech was selected, and 21 Russian students will enter the 3-year Master's program

Skolkovo Tech invited 41 finalists from 15 different Russian universities, who, based upon the first round of the admissions process, demonstrated outstanding academic capabilities. The weekend was designed as an opportunity to gain greater insight into the students' abilities and discern whether they would be a good match for the unique 3-year Master's Fellowship Program that includes one year abroad.

In turn, Selection Weekend provided the students with a chance to experience the environment they would be entering and gauge if it would be a fit for them.

President Edward Crawley kicked off the weekend, greeting the students and calling on them to make an impact in the world around them: at Skolkovo Tech, in Russia and globally. "They, as the first class, will have a unique opportunity to instill lasting impact at Skolkovo Tech," he said. "Most importantly, they will be the class that shapes the culture and curriculum for years to come."

During the weekend, students were broken up into groups of 6 to 8, where they custom modified voltmeters, engineered wind turbines and appraised patent potential for real life discoveries. The students' English language skills were also evaluated through TOEFL exams and during group exercises.

At each stage of the process, SkTech senior staff, Founding Faculty Fellows and MIT alumni assessed the students' interpersonal, technical and leadership skills as well as their creativity.

To attain a comprehensive understanding of their personalities and abilities, this same group of evaluators interviewed each prospective student.

The following week, a smaller Admissions Committee, consisting of Skolkovo Tech senior staff and President Crawley, gathered and made final decisions on who would enter the first class.

Director of Students Bram Caplan said, “The students were a fabulous group of first-year applicants who exceeded our expectations in their technical knowledge, creativity and sincere passion to make an impact in the world. It is apparent that each student desires to apply the knowledge they would gain at Skolkovo Tech to solve the pressing problems of our day. This made our job of selecting the members of the inaugural class truly difficult.”

Innovation Workshop for matriculating Master's students at MIT

The inaugural class of Skolkovo Tech students will reunite at MIT in August for a 4-week Innovation Workshop to build their self-efficacy in innovation and entrepreneurship. During the workshop, Skolkovo Tech's first class of students will experience a unique introduction to entrepreneurship and team-based project work at MIT's campus in Cambridge, MA.

The first SkTech course will prime students on how to approach scientific research, so they analyze lab results with the intent to create a useable product that is either better or completely different from existing technologies.

In addition, about two graduate students from each of the 4 universities that Skolkovo Tech students will attend in the fall and 2 students each from 4 of Russia's National Research Universities — ITMO, Moscow Physics and Technology Institute, Moscow State Technical University, and Tomsk Polytechnic University — will be invited.

In September, the students will set off for 1 of 4 world-class universities — Imperial College of London, Hong Kong University of Science and Technology, MIT and the Swiss Federal Institute of Technology Zurich — to take Master's-level courses for a year and then return to Skolkovo Tech for the final 2 years. This will offer a unique opportunity for students to evaluate the strengths and weaknesses of each excellent university and introduce the best aspects into Skolkovo Tech upon their return.

Student Selection Weekend:

- 41 finalists from 15 Russian Universities
- 21 students will enter the inaugural class
- 20 MIT students will join the pilot program in August



Faculty@SkTech

After receiving 498 applications, the first faculty interview took place on May 10

After receiving 498 applications for permanent faculty positions, Skolkovo Tech launched the interviewing process on May 10. It was the first of a massive campaign that has set a goal of hiring 200 faculty members by the end of the decade.

To put that into perspective, President Edward Crowley said that Skolkovo Tech will have to interview 3 to 4 candidates for each faculty position: an initiative that would require 1 interview every day for the next 2 1/2 years.

A search committee, consisting of MIT faculty (who are members of the MIT/SkTech Initiative) and SkTech Founding Faculty Fellows, reviews applications for tenured and tenure-track positions. They assess prospective faculty based upon research excellence, commitment to education, and involvement with innovation and entrepreneurship.

By May 15, the search committee had interviewed 3 candidates.

For more information on the faculty positions, see <https://sktech-search.mit.edu/>.

Founding Faculty Fellows

Over 300 hopeful candidates have applied for positions as Founding Faculty Fellows, and we are proud to announce 6 new members who have recently joined the Skolkovo Tech Team.

Founding Faculty Fellows will help shape and direct Skolkovo Tech by advising on search committees for selecting faculty, research proposals and students as well as recruiting future faculty applicants.

They were selected through a highly competitive process with involvement by faculty from the MIT/SkTech Initiative.

We are excited to welcome the following leaders to the Skolkovo Tech Team:

Dr. Michael Chertkov is a Technical Staff Member in the Statistical Physics of Condensed Matter and Complex Systems Group, and the lead of Physics of Algorithms and Optimization and Control of Smart Grids Directed Projects at Los Alamos NL.

Dr. Dmitri Kharzeev is a professor of physics within the Department of Physics and Astronomy at Stony Brook University as well as a senior scientist of the Physics Department at the Brookhaven National Laboratory and an adjunct professor at Yale University. He is particularly interested in the theory of heavy ion collisions.

Dr. Raj Rajagopalan has been chair of the Chemical & Pharmaceutical Engineering Singapore-MIT Alliance since 2006 and a professor within the Department of Chemical & Biomolecular Engineering at the National University of Singapore.

Dr. Stas Smirnov is a professor in the Department of Analysis, Mathematical Physics and Probability at the University of Geneva. In 2010, he was awarded the Fields Medal for his work in statistical physics and concentrates on the fields of complex analysis, dynamical systems and probability theory.

Dr. Maurizio Sobrero is the head of the Department of Management and President of the Research Board at the University of Bologna, Italy. He has published numerous articles on economics and innovation management while his research has focused on topics such as R&D investments and firm market value. He has served as an expert for the European Patent Office, the Swedish Royal Academy of Engineering and the United Nations.

Dr. Vladislav V. Verkhusha is a full professor and head of Laboratory Biophotonics Center and Department of Anatomy and Structural Biology at the Albert Einstein College of Medicine at Yeshiva University, New York. His lab largely focuses on fluorescent proteins and biosensors.

- 200 faculty members are expected to be hired by 2020
- 498 applications received
- 3 to 4 candidates to be interviewed for each faculty position
- The first Permanent Faculty member will be announced in June

For more information on the Founding Faculty Fellows program and Faculty Search, please contact Mikhail Myagkov, Vice President for Academic Affairs, at myagkov@skolkovotech.ru.

Innovation@SkTech

Pilot Innovation Support Program is in the final stages before announcing commercialization assistance to five Russian research groups

In June, the Center for Entrepreneurship and Innovation (CEI) will announce the 5 winning research groups from Russian universities and research institutes who will be accepted into the Innovation Support Program, ISP. The CEI team and an international review panel have meticulously whittled down the 82 applicants to 11 finalists and have now decided upon 5 winning teams.

The ISP focuses on providing support to move Russian research projects to the market. To realize this goal, awardees not only receive funding, but also mentorship from seasoned technology entrepreneurs, industry experts and venture investors. These so-called “Catalysts” are a highly vetted group of individuals with experience in the issues surrounding innovation, technology commercialization, entrepreneurship and legal aspects of the business ventures, and they are expected to advise the ISP awardees throughout the period of the program.

An international review panel consisting of scientists, entrepreneurs and technology-commercialization specialists has participated in evaluating the proposals, advancing specific groups based upon scientific and technological excellence as well as the research projects’ proximity to the market.

Knowledge Transfer Roadmap

One of the major goals of the ISP is to develop the CEI’s capabilities in overseeing all aspects of Intellectual Property management, using the projects as training cases. Knowledge generated in the process will be shared with the general public. CEI will also openly disseminate best practices and approaches for addressing the unique aspects of the IP commercialization in Russia.

“The process presents a challenging road ahead, said Ilia Dubinsky,” CEI Director at Skolkovo Tech, citing as an example Intel Capital’s pilot program on technology and IP transfer out of Russian universities and research institutions, an effort, which had very few practical results.

“Skolkovo Tech will model its practice of Intellectual Property commercialization after the successful models of the major research universities in Europe, the United States and Asia. This is a fresh road we are on, adjustments will have to be made along the way in our pilot year, but whatever the outcome, it will be a great success for SkTech and all Russian academic institutions,” Dubinsky said.

CEI Workshop

The Second CEI Workshop will take place in Moscow on July 10-11. It will cover topics involving organizational development, research, education and community outreach in Entrepreneurship and Innovation. Close to 50 experts from industry, academia, Skolkovo Tech, the Skolkovo Foundation and international institutions are expected to be in attendance.

The previous workshop (Nov. 2011) identified major developmental and organizational issues facing the CEI, developed a broad strategy and plans for 2012. The July workshop will revisit some of the crucial questions such as research and education in E&I, review the work done over the past 8 months, help re-establish Skolkovo Tech’s focus on E&I and serve to further develop the strategy of how the unique SkTech triple helix (Education, Research and Entrepreneurship) will set Skolkovo Tech apart from other universities.

For more information on CEI and Skolkovo Tech visit: <http://skolkovotech.ru/>.

For further details about ISP, please contact Ilia Dubinsky, Director of the Center for Entrepreneurship and Innovation, at dubinsky@skolkovotech.ru.

Research@SkTech

13 Research Teams Move to the Next Level

Skolkovo Tech has selected 13 outstanding research teams to submit full proposals for the final stage in the first round of SkolkovoTech Call for Proposals (CFP) as it forges onward with the formation of the first 3 research centers.

The research centers will be an integral part of Skolkovo Tech with specific focus in one or more of the five strategic research fields of Skolkovo Tech: Biomedicine, Energy, Space, Nuclear and Information Sciences and Technologies.

More than 70 internationally recognized experts in relevant fields conducted a peer review of the 129 applying teams from over 350 universities who submitted white papers. During the process each proposal was evaluated on distinct criteria, including collaborative research, education and innovation components; impact on Russia; and building capacity at Skolkovo Tech.

The reviewers were impressed by the scientific and innovative quality of many of the submitted white papers. After the review process, Mats Nordlund, Vice President of Research at Skolkovo Tech, said: "Even though we could only invite a small number of full proposals in this first round, it is clear from the peer review that many more exciting and high potential Research Center ideas exist, which bodes well for our second round Call for Proposals."

Invited full proposals were due on June 1, 2012, launching the final stage of the peer review and selection process, which will culminate in recommendations for funding and negotiation of contracts with Skolkovo Tech.

As agreements are reached, the names of the first 3 Research Centers will be announced.

To solve the problems of tomorrow, each Research Center will be an international collaborative effort, partnering Skolkovo Tech with an international institution as well as a Russian institution.

International Research Co-Leads:

- Cambridge University
- LMU Munich
- MIT
- UC Berkeley
- UCLA
- University of Chicago
- University of Groningen
- University of Helsinki
- University of Pennsylvania

- 129 teams from 350 universities submitted white papers
- Proposals were reviewed by 70 internationally recognized experts
- 13 outstanding research proposals were selected

Research Center Proposers Conference

As part of a collaboration with MIT to develop Skolkovo Tech and its Research Centers, MIT and Skolkovo Tech will co-host the second Skolkovo Tech Research Center Proposers Conference on July 9-10, 2012 in Skolkovo, Russia.

The conference will provide a platform to discuss how researchers and the main stakeholders, like Russian industry, can become involved with the Skolkovo Tech endeavor through the Research Centers. They will also discover the nuances of the application process and more in-depth information on the financial, logistical and mentoring support that Skolkovo Tech will offer selected proposals.

Submissions for the second round of the call for proposals are due October 15, 2012.

MULTI-INSTITUTIONAL RESEARCH CENTERS



Russian Research Co-Leads:

- Institute of Biochemical Physics RAS
- Institute of General Genetics RAS
- Kazan Federal University
- Lomonosov Moscow State University
- Moscow Engineering Physics Institute
- National University of Science and Technology (MISIS)
- Novosibirsk State University
- Nuclear Safety Institute RAS
- Space Research Institute RAS

For more information about Skolkovo Tech's Research Center program, please contact Ivan Sherstov, Director of Research, at sherstov@skolkovotech.ru or contact SkTech-rc-call@mit.edu.

Further information can be found at the SkTech/MIT Initiative website: <http://web.mit.edu/SkTech>.

Leadership@SkTech

Skolkovo Institute of Science and Technology is on the path to become one of the best research institutes in the world

Skolkovo Tech prides itself on its culture of excellence, effected by our staff, faculty and researchers. Each of these members brings with them a unique set of qualities, and for us, it is their mix of diverse characters, high energy and our united purpose that define that spirit of innovation. They are our leadership, and it is because of them that we will cultivate Russia's brightest minds and construct a world-class university founded around education, research and entrepreneurship.

At the end of April, Skolkovo Tech welcomed Dr. Alexey Ponomarev as Vice President of Industrial Cooperation and Governmental Relations. He is responsible for collaboration with industry on Skolkovo Tech's main research themes, participation in governmental programs in education and science, and for other relations with industry and public officials.

To promote ties with industry, Dr. Ponomarev will spearhead the formation of working groups consisting of researchers and representatives from leading Russian and international companies. The working groups will be concentrated in Skolkovo Tech's five areas of interest, with focus on oil and gas, materials and structures, energy and manufacturing technology, information technologies, and biology. Through close cooperation, these groups will help develop research priorities and encourage industry leaders to play a larger role in Skolkovo Tech's research mission.

Dr. Ponomarev will also engage governmental and academic institutions to foster mutually beneficial relationships with their committees and expert groups.

Dr. Ponomarev is uniquely qualified to lead this endeavor after spending almost 30 years in both academia and research culminating in an appointment as Deputy Minister for Education and Science of the Russian Federation in 2010. He has also been a board member of several of Russia's largest industrial companies and played an integral role in the reorganization of the country's aviation industry. Being engrossed in industry, government and academia has primed Dr. Ponomarev to launch this new office and further Skolkovo Tech's goal to become a world-class research institution.

In 1982 after graduating from Moscow Institute of Physics and Technology, Dr. Ponomarev began building ties within Russian academia and government as a researcher and lab director at the Defense Research Institute. After 10 years, he became general director for the Interdepartmental Analytical Center and continued in that position until 2010. At the Center, created by the government as an advisory tool for ministries and institutes, Dr. Ponomarev oversaw research and analytical support in economics, innovation, industry, science and technology, and foreign economic policy.



Dr. Alexey Ponomarev joins Skolkovo Tech as Vice President of Industrial Cooperation and Governmental Relations.

In 1998, he made his first steps into industry by becoming the First Deputy General Director for Tupolev, Russia's oldest aviation company formed in 1922. In 2005, he served as Vice President of the United Aircraft Consortium, executing a merger among Russia's leading aviation researchers, designers and manufacturers to establish the United Aircraft Corporation, or UAC. The UAC, established by an initiative of the President of the Russian Federation, is charged with supplying 10 percent of the world's aviation market and competing on an equal level with the world's aviation companies by 2025. Upon the creation of the UAC, Dr. Ponomarev became the Development Director of Transportation Aircraft within UAC until 2008 when he shifted focus to the United Engine Corporation as Deputy General Director of Strategy, charged with turning the company into one of the top 5 world producers of turbine engines for aircraft.

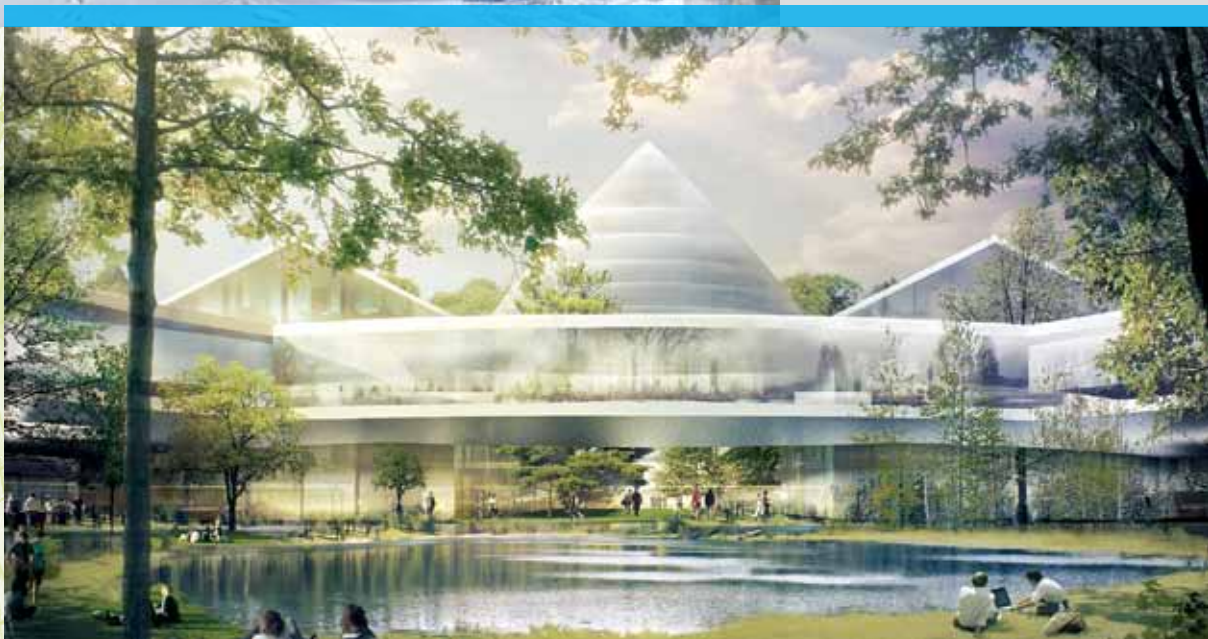
In 2010, he left his work in the aviation industry and became Deputy Minister for Education and Science for the Russian Federation.

Dr. Ponomarev also taught at the Higher School of Economics in the department for restructuring and development of industries, and he has been awarded the Order of Honor and given the rank of Honored Science and Engineering Worker of the Russian Federation.

Skolkovo Tech continues search for innovative leaders

Skolkovo Tech is actively seeking interested, committed and qualified applicants for faculty and staff positions.

Descriptions of staff positions can be found on www.skolkovotech.ru.



© Herzog & de Meuron

For all press related inquiries and to learn more about Skolkovo Tech, please contact Irina Lavrova, Communications Manager at lavrova@skolkovotech.ru.

Skolkovo Tech
Skolkovo Institute of Science and Technology

SkTech/MIT
I N I T I A T I V E

