

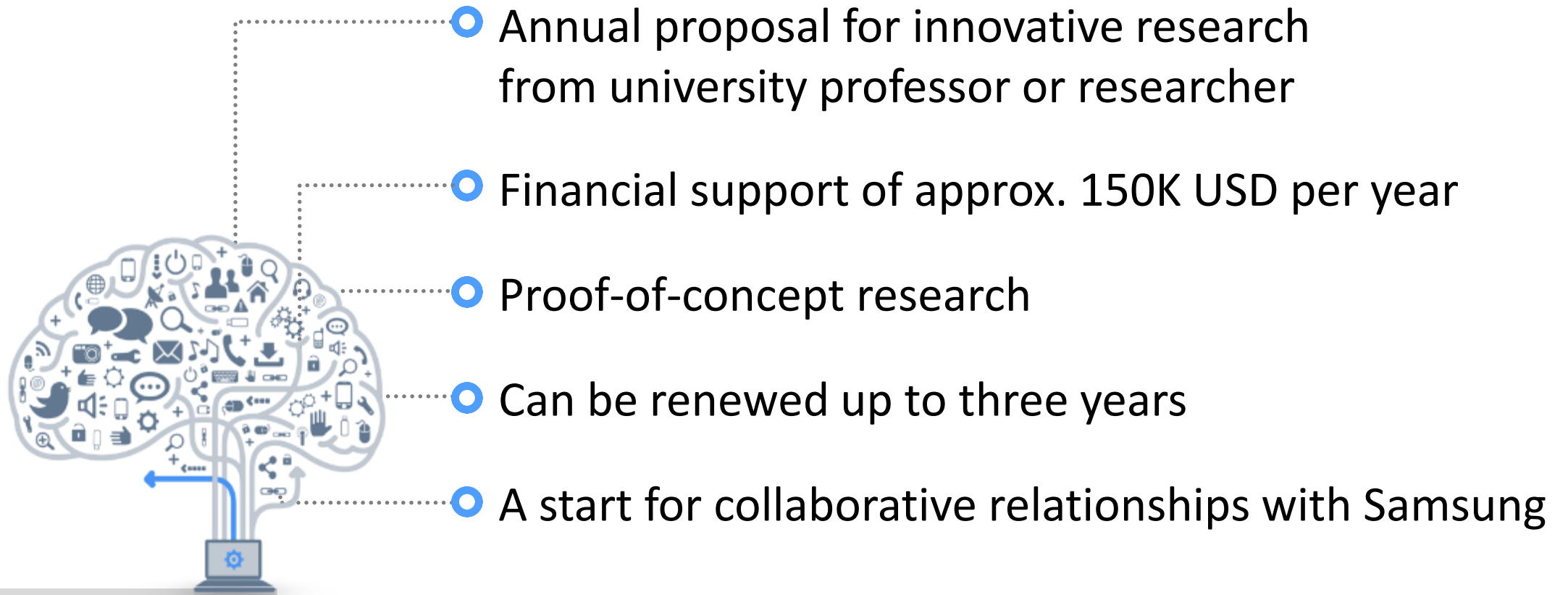
Global Research Outreach 2022

We annually call for innovative research proposals, open to the world's leading universities.



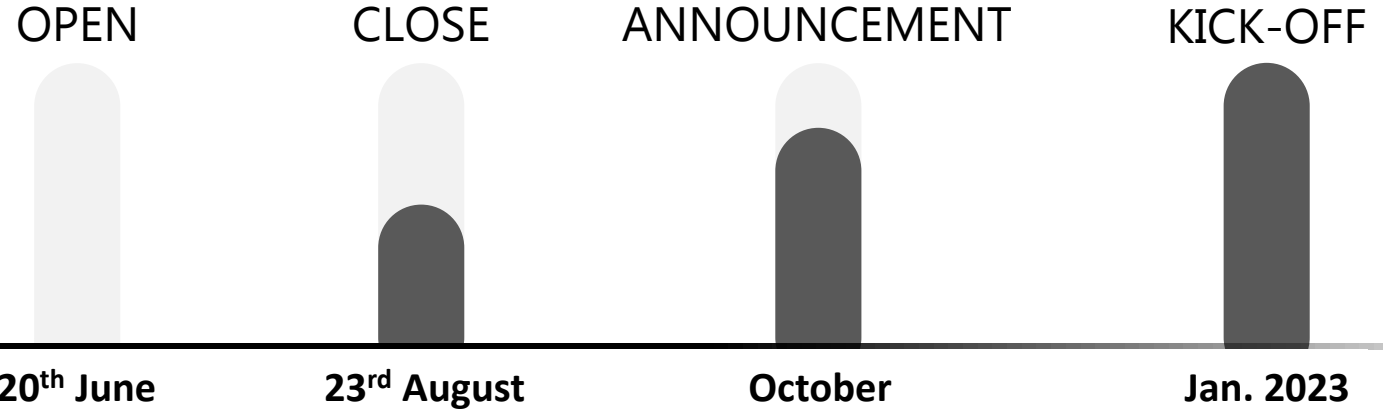
Since 2009

20 countries, 150 Universities, 450 Winning Projects

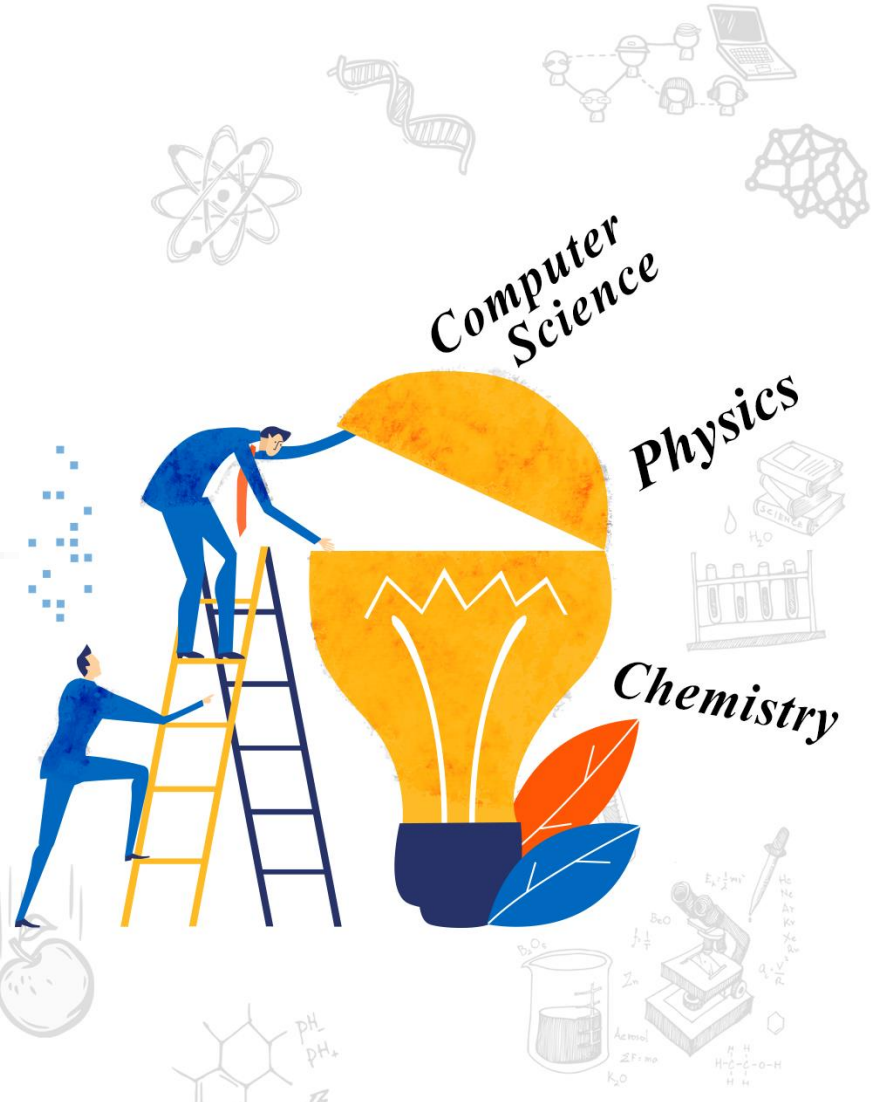


2022 GRO Timeline

We look forward to your innovative proposals

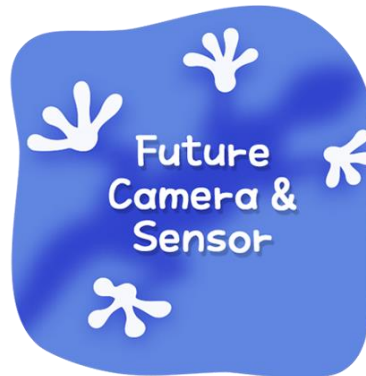
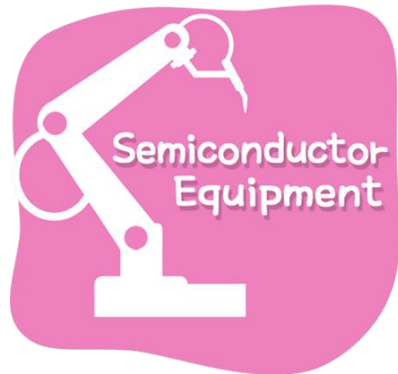
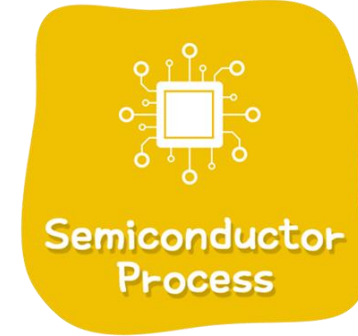
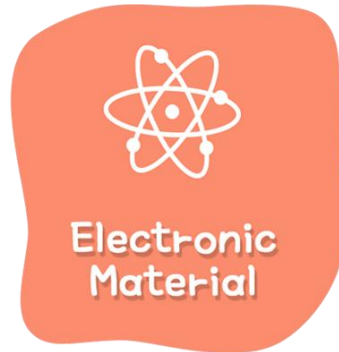


* 09:00 A.M. Korea Standard Time, UTC+9



2022 Open Research Themes

Seeking proposals in 8 themes



List of 2022 Research Topics

Theme	Sub-Theme
1. New Computing	1-1 Computing Devices & Architecture
	1-2 Rack-scale Computing
	1-3 Intelligent, Reliable and High efficient Storage for HPC
	1-4 Technologies to Attack the Memory and Communication Wall
2. Electronic Material	2-1 Inorganic P-type Semiconductor
	2-2 Oxide semiconductor based Memory Device
	2-3 (Ferroelectric, Resistive, Phase change, Magnetic) Material based Memory Device
	2-4 Scalable Channel Material for Logic Device beyond Si
	2-5 Soft Robotics
	2-6 New Materials
3. Machine Intelligence	3-1 Multi-task Vision AI
	3-2 Tiny Machine Learning
	3-3 Future Mobility Technology
4. Semiconductor Process	4-1 ALD for Semiconductor
	4-2 Ultrathin, High Quality SiO ₂ for Extremely Large Surface Area
	4-3 Sub-10nm, High Aspect Ratio Trench Etching Technique
	4-4 3D Monolithic Integration
5. Semiconductor Equipment	5-1 Fundamental Automation/Manipulation Technology for Semiconductor Equipment
	5-2 AI/ML Solutions for Semiconductor Equipment & Processes
	5-3 Technology for Semiconductor Metrology and Inspection
6. Future Camera & Sensor	6-1 Low-height High-zoom Camera Module Optics, Algorithms, and Camera System
	6-2 Short to Long IR technologies, Coatings and Devices for Imaging & Sensing Applications
7. Next Gen. Battery	7-1 Safety-enhanced Battery based on LIB chemistry
	7-2 Battery Reuse & Recycling
	7-3 Low-Cost Battery
8. Environmental Technology for Sustainability	8-1 Carbon Capture and Utilization
	8-2 Virus Sensing, Diagnosis, and Inactivation

SAMSUNG

For more questions, please contact below.

America : gro.usa@samsung.com

Europe : gro.europe@samsung.com

India : gro.asia@samsung.com

Japan : gro.japan@samsung.com

Etc. : grooffice@samsung.com

https://www.sait.samsung.co.kr/saithome/about/collabo_overview.do