

## FACULTY MEMBERS

ABDU, URI – Life Sciences, NIBN  
Ph.D., Ben-Gurion Univ., 2000  
Research Interests: DNA damage  
checkpoint during *Drosophila* oogenesis  
and the role of the microtubules  
cytoskeleton in RNA localization  
[abdu@bgu.ac.il](mailto:abdu@bgu.ac.il)

ABRAHAM, URI – Mathematics &  
Computer Science  
Ph.D., Hebrew University, 1979  
RESEARCH INTERESTS: Set Theory.  
Mathematical  
Logic. Concurrency (in Computer Science)  
[abraham@cs.bgu.ac.il](mailto:abraham@cs.bgu.ac.il)

ABRAMOVICH, SIGAL - Geological &  
Environmental Sciences  
Ph.D., Univ. of Princeton, 2002  
Research Interests: Paleocology and  
paleoclimatology of the Cretaceous.  
Foraminifera.  
[sigalabr@bgu.ac.il](mailto:sigalabr@bgu.ac.il)

ABRAMSKY, ZVIKA – Life Sciences  
Ph.D., Colorado State Univ., 1976  
Research Interests: Community ecology  
of desert granivours. The importance of  
density dependent habitat selection.  
Interspecific competition and risk of  
predation in structuring communities of  
desert rodents. The relationship between  
productivity and diversity and  
reconciliation ecology.  
[zvika@bgu.ac.il](mailto:zvika@bgu.ac.il)

ADAR, EILON - Geological &  
Environmental Sciences; joint appointment  
with Blaustein Inst. Desert Research.  
Ph.D., Univ. of Arizona, 1984  
Research Interests: Evaluation of recharge  
in arid basins. Ground water modeling with  
environmental tracers. Modeling of ground  
water contamination in fractured chalk aquitard.  
[eilon@bgu.ac.il](mailto:eilon@bgu.ac.il)

AHARONY, AMNON - Physics  
Ph.D., Tel-Aviv Univ., 1971  
Research Interests: Theoretical  
condensed matter physics: Quantum theory of  
mesoscopic systems. Statistical physics. Random  
systems.  
[aharony@post.tau.ac.il](mailto:aharony@post.tau.ac.il)

ALPAY, DANIEL - Mathematics  
Ph.D., The Weizmann Inst., 1985  
Research Interests: Operator theory system theory.  
Interpolation problems. Riemann surfaces.  
[dany@math.bgu.ac.il](mailto:dany@math.bgu.ac.il)

ALTSHULER, AMOS - Mathematics (emeritus)  
Ph.D., The Hebrew Univ., 1970  
Research Interests: Convex polytopes. Graph theory.  
Combinatorial topology.  
[alt@math.bgu.ac.il](mailto:alt@math.bgu.ac.il)

ASHKENASY, GONEN - Chemistry  
Ph.D., Weizmann Institute of Science, 2001  
Research Interests: Bioorganic Chemistry. Peptide and protein  
chemistry.  
Biomimetic catalysis. Molecular networks.  
Synthetic receptors and catalysts.  
[gonenash@bgu.ac.il](mailto:gonenash@bgu.ac.il)

AVISHAI, YSHAI - Physics  
Ph.D., The Weizmann Inst., 1970  
Research Interests: Theoretical  
condensed matter physics.  
yshai@bgu.ac.il

BAND, YEHUDA - Chemistry  
Ph.D., Univ. of Chicago, 1973  
Research Interests: Collision theory. Quantum mechanical  
scattering. Light scattering. Nonlinear optics. Laser  
physics and chemistry. Atomic and molecular physics and  
chemistry. Dissociation of molecules. Charge exchange  
processes. Optimal control theory. Electronic transport  
phenomena in condensed phases. Degenerate quantum  
fluids. Bose-Einstein condensation. Thermodynamics.  
band@bgu.ac.il

AZMON, EMANUEL – (retired) Geological  
& Environmental Sciences  
Ph.D., Univ. of S. California, 1960  
Research Interests: Sedimentology.  
Airborne dust. Flow of waste through  
fractures and porosities. Role of clays  
in energetic and mineralogical changes.  
Heavy minerals provenance in dust.  
Author of fourteen scientific novels.  
azmon@bgu.ac.il

BAR, ILANA - Physics  
Ph.D., Ben-Gurion Univ., 1982  
The Institutes for Applied Research  
Research Interests: Molecular dynamics .  
Laser-based spectroscopic methods.  
ibar@bgu.ac.il

BACHMAT, EITAN - Computer Science  
Ph.D., Massachusetts Institute of  
Technology, U.S.A. 1994  
RESEARCH INTERESTS: Arithmetic  
Geometry. Storage Systems.  
[ebachmat@cs.bgu.ac.il](mailto:ebachmat@cs.bgu.ac.il)

BAR-ZVI, DUDY – Life Sciences  
Ph.D., Ben-Gurion Univ., 1984  
Research Interests: Plant molecular  
biology. Stress regulated plant genes.  
Bioenergetics.  
barzvi@bgu.ac.il

BAHAT, DOV –(Emeritus) Geological &  
Environmental Sciences  
Ph.D., Univ. of Melbourne, 1967  
Research Interests: Tectonofractography,  
the study of fractography and application  
to structural geology. Joints and faults.  
Fracturing of brittle materials under  
laboratory conditions. Electromagnetic  
radiation induced by fracture.  
bahat@bgu.ac.il

BAR-TOUV, YAACOV - (emeritus) Physics  
Ph.D., The Weizmann Inst., 1966  
1966Research Interests: Nuclear physics.  
Mesoscopic physics.  
bartouv@bgu.ac.il

BALABAN, MIRA - Computer Science  
Ph.D., Weizmann Institute of Science, 1982  
RESEARCH INTERESTS: Conceptual  
modelling, Software engineering, Databases  
(semantics), knowledge representation (time,  
description logics), Computer music  
(computational view of music concepts).  
[mira@cs.bgu.ac.il](mailto:mira@cs.bgu.ac.il)

BARANES, DANNY – Life Sciences  
Ph.D, The Hebrew Univ., 1992  
Research Interests: Neurobiology and cell  
biology. Modern methods in microscopy.  
dbaran@bgu.ac.il

BARAK, ZE'EV – Life Sciences

Ph.D., Weizmann Inst., 1972

Research Interests: Structure-function relationship  
in enzymes and their applied biotechnological  
implication. Regulation and inhibition of amino acid  
synthesis and  
interaction of synthesis and transport systems.

Translational frameshifting in bacteria. Biological  
control of mosquitoes by *Bacillus thuringiensis* var.  
israelensis.

[barakz@bgu.ac.il](mailto:barakz@bgu.ac.il)

BARASH, DANNY - Computer Science  
Ph.D., University Of California at Davis,  
1999

RESEARCH INTERESTS: Bioinformatics,  
RNA Structure, Imaging, Scientific  
Computing, Numerical Analysis.  
[dbarash@cs.bgu.ac.il](mailto:dbarash@cs.bgu.ac.il)

BECKER, JAMES Y. – Chemistry  
Ph.D., The Hebrew Univ., Jerusalem, 1973  
Research Interests: 1) Organic  
electrochemistry - synthesis and mechanism.  
Organosilicon compounds;  
Functionalization of organic molecules;  
Electrocatalysis. 2) Molecular organic  
conductors: synthesis, structure, charge-  
transfer complexes and ion-radical salts,  
conductivity, electrochemistry and spectral  
properties; 3) Electrochemistry in ionic  
liquids  
[becker@bgu.ac.il](mailto:becker@bgu.ac.il)

BEIMEL, AMOS - Computer Science  
D.Sc., Technion, Haifa, 1996  
RESEARCH INTERESTS: Cryptography.  
Complexity Theory.  
[beimel@cs.bgu.ac.il](mailto:beimel@cs.bgu.ac.il)

BEJERANO-ROTH NURIT – Life  
Sciences - (retired)  
Ph.D., The Hebrew Univ., 1968  
Research Interests: Light effects on plant  
development and physiology. Stomatal  
movement. Mycorrhiza. Cultivation of local  
truffles and introduction of European  
truffles.  
[nuritrb@bgu.ac.il](mailto:nuritrb@bgu.ac.il)

BELITSKII, GENRICH - Mathematics  
Ph.D., Kharkov, 1966  
Research Interests: Local theory of dynamical  
systems.  
Functional equations. Smooth dynamical  
systems.  
[genrich@math.bgu.ac.il](mailto:genrich@math.bgu.ac.il)

BEN-ABRAHAM, SHELOMO I.- (emeritus)  
Physics Ph.D., The Czechoslovak Acad. of  
Sciences, 1961 .  
Research Interests: Condensed matter. Statistical  
mechanics .  
[benabr@bgu.ac.il](mailto:benabr@bgu.ac.il)

BEN-SHAHAR, OHAD – Computer Science  
Ph.D., Yale University, 2003  
RESEARCH INTERESTS: Computational vision  
and image understanding, Human perception and  
visual psychophysics, Computational neuroscience  
of visual systems, Interface between vision,  
graphics, and robotics.  
[obs@cs.bgu.ac.il](mailto:obs@cs.bgu.ac.il)

BENJAMINI, CHAIM - Geological &  
Environmental Sciences  
Ph.D. The Hebrew Univ., 1980  
Research Interests: Micropaleontology of  
planktic and benthic calcareous microfossils.  
Genesis, stratigraphy and microfacies of  
Mesozoic and Cenozoic Tethyan carbonate  
facies, sequences and paleoenvironments.  
Regional stratigraphy of Israel and the Middle  
East. The Mediterranean continental shelf off  
Israel.  
[chaim@bgu.ac.il](mailto:chaim@bgu.ac.il)

BERNSTEIN, JOEL - Chemistry  
Ph.D., Yale Univ., 1967  
Research Interests: General and structural chemistry. Solid state chemistry. Chemical crystallography, polymorphism, hydrogen bonding, graph set analysis.  
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BOUSKILA, AMOS – Life Sciences  
Ph.D., Univ. of California at Davis, 1993  
Research Interests: Behavioral ecology, and in particular behaviors related to predation. Effect of the internal states of animals on behaviors such as predator-avoidance. Mathematical models (game theory and state variable models) as a tool in the study of the behavior of animals. Habitat requirements and conservation of reptiles.  
bouskila@bgu.ac.il

BEREND, DANIEL - Mathematics  
Computer Sciences  
Ph.D., The Hebrew Univ., 1982  
Research Interests: Number theory  
Applied probability.  
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BRAFMAN, RONEN I. - Computer Science  
Ph.D., Stanford University, 1996  
RESEARCH INTERESTS: Automated Planning and Decision Making. Decision Support Systems. Modeling and Reasoning about Preferences. Multi-Agent Learning.  
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BEREND, DANIEL – Mathematics,  
Computer Science  
Ph.D., Hebrew University, 1982  
RESEARCH INTERESTS: Number Theory. Applied Probability. Combinatorial Algorithms.  
[berend@cs.bgu.ac.il](mailto:berend@cs.bgu.ac.il)

BRIK ASHRAF - Chemistry  
Ph.D.; Technion-Israel Institute of Technology, 2001  
Research interest: Organic and Bioorganic Chemistry, Enzyme inhibition, Peptidomimetics, Protein Chemistry, Glycopeptide and Glycoprotein Synthesis, Posttranslational Modification and Protein Function.  
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BESSER, AMNON - Mathematics  
Ph.D., Tel-Aviv Univ., 1994  
Research Interests: Arithmetical algebraic geometry and automorphic forms.  
bessera@math.bgu.ac.il

BRUSTEIN, RAM - Physics  
Ph.D., Tel Aviv Univ .  
Research Interests: Theoretical high-energy physics , cosmology. Astro-particle physics.  
ramyb@bgu.ac.il

BITTNER, SHMUEL - Chemistry  
Ph.D., The Hebrew Univ., 1965  
Research Interests: Organic synthesis. Natural products. Quinochemistry. Quinonyl amino acids.  
bittner@bgu.ac.il

CARMELI, MOSHE - (emeritus) Physics  
D.Sc., The Technion, 1964  
Research Interests: Cosmology. General relativity . Gravitation.  
carmelim@bgu.ac.il

CHAYOTH, REUBEN – Life Sciences -  
(retired)  
Ph.D., The Hebrew Univ., 1971  
Research Interests: Science education.  
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CHIPMAN, DAVID – Life Sciences  
Ph.D., Columbia Univ., 1965  
Research Interests: Protein Structure-  
function relationships. Enzyme  
mechanisms. Protein engineering for  
biotechnology. Biochemical dynamics  
and control of multistep pathways.  
[chipman@bgu.ac.il](mailto:chipman@bgu.ac.il)

CODISH, MICHAEL - Computer Science  
Ph.D., Weizmann Institute of Science, 1991  
RESEARCH INTERESTS: Semantic  
Based Program Analysis.  
[mcodish@cs.bgu.ac.il](mailto:mcodish@cs.bgu.ac.il)

COHEN, DORON - Physics  
Ph.D., The Technion, 1993  
Research Interests: Chaos and quantum  
mechanics(" Quantum Chaos"). Theory of  
driven mesoscopic (nano (systems.  
Quantum irreversibility, dissipation and  
dephasing. Relation to quantum computing.  
Application to quantal Brownian Motion.  
[dcohen@bgu.ac.il](mailto:dcohen@bgu.ac.il)

COHEN, MIRIAM - Mathematics  
Ph.D., Tel-Aviv Univ., 1976  
Research Interests: Noncommutative  
algebras.  
Hopf algebras .Quantum groups.  
[mia@math.bgu.ac.il](mailto:mia@math.bgu.ac.il)

DABOUL, JAMIL - Physics  
Ph.D., Univ. of Heidelberg, Germany, 1965  
Research Interests: Mathematical physics.  
Dynamical symmetries. Infinite-dimensional  
algebras. Coherent and  
squeezed states. Nonlinear dynamics. Singular  
potentials . Theoretical high-energy physics.  
[daboul@bgu.ac.il](mailto:daboul@bgu.ac.il)

DAVIDSON, AHARON - Physics  
D.Sc., The Technion, 1977  
Research Interests: Gravity. Cosmology.  
Dark matter. Higher dimensional field theory.  
Electro/nuclear interactions.  
[davidson@bgu.ac.il](mailto:davidson@bgu.ac.il)

DINITZ, YEFIM - Computer Science  
Ph.D., Institute of Mathematical Economics,  
Moscow, 1973  
RESEARCH INTERESTS: Graph Algorithms.  
Network Flows. Imbedding and Layout of  
Interconnection Networks. Discrete  
Optimization. Distributed Communication  
Complexity. Combinatorial algorithms,  
Visualization of algorithms.  
[dinitz@cs.bgu.ac.il](mailto:dinitz@cs.bgu.ac.il)

DINUR, URI - Chemistry  
Ph.D., The Hebrew Univ., 1979  
Research Interests: Theoretical physical  
chemistry. Molecular interactions.  
[uridinur@bgu.ac.il](mailto:uridinur@bgu.ac.il)

DOLEV SHLOMI - Computer Science  
D.Sc. Technion, IIT, 1992  
RESEARCH INTERESTS: Distributed  
Algorithms. Communication Networks. Fault-  
Tolerance. Self-Stabilization. Cryptography.  
[dolev@cs.bgu.ac.il](mailto:dolev@cs.bgu.ac.il)

EFRAT, IDO - Mathematics  
Ph.D., Tel-Aviv Univ, 1990  
Research Interests: Theory of fields. Galois theory. Valuation theory.  
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EICHLER, DAVID - Physics  
Ph.D., Mass. Inst. Tech. (M.I.T.) USA, 1976  
Research Interests: Astrophysics. Particle astrophysics. Cosmology. Plasma physics. Theoretical biology.  
[eichler@bgu.ac.il](mailto:eichler@bgu.ac.il)

EICHLER, JERRY - Life Sciences  
Ph.D., Weizmann Inst., 1994  
Research Interests: Archaea. Post-translational modifications. Protein Glycosylation. Protein translocation.  
[jeichler@bgu.ac.il](mailto:jeichler@bgu.ac.il)

EISENBERG, THEODORE - Mathematics  
Ph.D., Univ. of Maryland, 1970  
Research Interests: Mathematical education. Curriculum development/Evaluation math. Spatial visualization/Concept formation.  
[eisen@math.bgu.ac.il](mailto:eisen@math.bgu.ac.il)

EL SANA, JIHAD - Computer Science  
Ph.D., State University of New York, 1995  
RESEARCH INTERESTS: Computer Graphics, Computational Geometry, Geometric Modeling, Digital Image Processing, Multi-Media, Virtual Reality, and Digital Video Processing.  
[el-sana@cs.bgu.ac.il](mailto:el-sana@cs.bgu.ac.il)

ELGART, ALEXANDER - Mathematics  
Ph.D., Technion, 2000  
Research Interests: Mathematical Physics, Analysis  
[elgart@math.bgu.ac.il](mailto:elgart@math.bgu.ac.il)

ELHADAD, MICHAEL - Computer Science  
Ph.D., Columbia University, 1992  
RESEARCH INTERESTS: Natural Language Generation (FUF). Automatic Text Summarization. Hebrew Computational Linguistics. Software Engineering (Service Oriented Architecture, Semantic Web Services)  
[elhadad@cs.bgu.ac.il](mailto:elhadad@cs.bgu.ac.il)

ELKIN, MICHAEL - Computer Science  
Ph.D., Weizmann Institute of Science, 2002  
RESEARCH INTERESTS: Graph algorithms, distributed computing, low-distortion embeddings, approximation algorithms, hardness of approximation.  
[elkinm@cs.bgu.ac.il](mailto:elkinm@cs.bgu.ac.il)

ENTIN-WOHLMAN, ORA - Physics  
Ph.D., Bar-Ilan Univ. 1973  
Research Interests: Theoretical condensed matter physics.  
[entin@post.tau.ac.il](mailto:entin@post.tau.ac.il)

EREZ, GIDEON (emeritus) - Physics  
D.Sc., The Technion, 1960  
Research Interests: Lasers. Atomic spectroscopy.

EYAL, MOSHE - (Retired) Geological & Environmental Sciences  
Ph.D., The Hebrew Univ., 1975  
Research Interests: Igneous petrology. Volcanology. The Precambrian crystalline massif in Sinai. Development of the Dead-Sea and Red-Sea rifts.  
[moey@bgu.ac.il](mailto:moey@bgu.ac.il)

EYAL, YEHUDA - Geological & Environmental Sciences  
Ph.D., The Hebrew Univ., 1976  
Research Interests : Structural geology, and paleo-stress analysis, Israel and Kellowna area, British Columbia, Canada. Development of the Dead Sea Rift and associated structures. Brittle deformation, joints. Parameters controlling joint spacing. Stylolites and pressure solution.  
eyal@bgu.ac.il

FAIMAN, DAVID - Physics-  
Inst. for Desert Research  
Ph.D., Univ. of Illinois, USA. 1969  
Research Interests: Solar energy. Solar radiation measurements. Photovoltaic devices and systems . Solar-thermal power systems.

FEINSTEIN, SHIMON - Geological & Environmental Sciences  
Ph.D., Ben Gurion Univ., 1985  
Research Interests: Petroleum and source rock geochemistry. Maturity of organic materials. Thermo-tectonic evolution of sedimentary basins in different tectonic settings. Degradation processes of organic contaminants.  
shimon@bgu.ac.il

FEINGOLD, MARIO - Physics  
Ph.D., The Technion, 1986  
Research Interests: Single molecule and cell biophysics .  
mario@bgu.ac.il

FEINTUCH, AVRAHAM - Mathematics  
Ph.D., Univ. of Toronto, 1972  
Research Interests: Operator theory. Linear systems. Optimal control.  
abie@math.bgu.ac.il

FISCHER, DANIEL - Computer Science  
Ph.D., Tel-Aviv University, 1995  
RESEARCH INTERESTS: Computational Structure Molecular Biology. Bioinformatics. Interpreting Genomes. Protein Fold Recognition. Pattern Recognition in Biological Macromolecules. Protein Structure Comparison. Molecular Recognition and Docking of Ligands onto Receptor Molecules.  
[dfischer@cs.bgu.ac.il](mailto:dfischer@cs.bgu.ac.il)

FISHOV, ITZHAK – Life Sciences  
Ph.D., Inst. of Biol. Phys., Acad. of Sci. of USSR, 1983  
Research Interests: Mechanism of bacterial cell cycle regulation. Membrane dynamics. Bioenergetics. Bacterial nucleoid.  
fishov@bgu.ac.il

FOLMAN, RON - Physics  
Ph.D., CERN, 1998  
Research Interests: Cold atoms .  
folman@physi.uni.heidekberg.de

FONF, VLADIMIR - Mathematics (emeritus)  
Ph.D., Univ. of Sverdlovsk, 1979  
D.Sc., Warsaw, 1991  
Research Interests: Functional analysis. Geometry of Banach spaces.  
fonf@math.bgu.ac.il

FRIEDLANDER, MICHAEL – Life Sciences (emeritus)  
Ph.D., The Hebrew Univ., 1967  
Research Interests: Insect endocrinology and reproduction. Sperm differentiation. Comparative spermatology and evolution. Biological ultrastructure.  
frdln@bgu.ac.il



FUHRMANN, PAUL A. - Mathematics  
Ph.D., Columbia Univ., 1967  
Research Interests: Mathematical theory  
of control systems. Operator theory in  
Hilbert space  
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GANOR, JIWCHAR - Geological &  
Environmental Sciences  
Ph.D., The Hebrew Univ., 1992  
Research Interests: Kinetics of dissolution  
and precipitation of minerals at low  
temperature-laboratory experiments and  
modeling.  
ganor@bgu.ac.il

GEDALIN, MICHAEL - Physics  
Ph.D., Space Res. Inst., Moscow, 1986  
Research Interests: Plasma physics.  
Astrophysics and  
space physics. Nonlinear phenomena.  
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GERTSBAKH, ILYA - (emeritus)  
Probability & Statistics  
Ph.D., The Latvian Acad. of Sciences, 1964  
Research Interests: Applied probability &  
statistics. Operations research. Reliability  
theory.  
elياهو@math.bgu.ac.il

GERSTEN, ALEXANDER - Physics  
Ph.D., The Weizmann Inst., 1967  
Research Interests: Foundation of quantum  
physics . Applications of physics in  
medicine.  
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GERSANI, MORDECHAI – Life Sciences  
(retired)  
Ph.D., The Hebrew Univ. 1980 Research  
Interests: Penotypic plasticity in the root system  
of desert plants. Integration between parts of the  
root system as a response to environmental  
factors. Below ground habitat selection in plants.  
I test among a passive model of habitat selection,  
an animal-based model (ideal free distribution,  
Fretwell and Lucas 1970), and a game theoretic  
model that permits plants to adjust their root  
growth strategy to the roots of ompeting plants.  
gersani@bgu.ac.il

GIASNER, YAIR - Mathematics  
Ph.D., Hebrew University, 2002  
Research Interests: Combinatorial group Theory

GILL, DAVID - (emeritus) Physics  
Ph.D., The Weizmann Inst., 1958  
Research Interests: Biological physics .  
dgill@bgu.ac.il

GLASER, ROBERT - Chemistry  
Ph.D., Rutgers Univ., 1969  
Research Interests: Stereochemistry. Nuclear  
magnetic resonance (NMR) spectroscopy.  
Drug polymorphism by solid-state NMR. Drug  
structure determination. Molecular modeling.  
Structural medicinal chemistry.  
glaser@bgu.ac.il

GOLDBERG, MAYER - Computer Science  
Ph.D., Indiana University, 1996  
RESEARCH INTERESTS: Programming  
languages, semantics, lambdaCalculus, pi-  
Calculus, compiler optimizations,  
continuations and control, functional  
programming, and object orientation.  
[gmayer@cs.bgu.ac.il](mailto:gmayer@cs.bgu.ac.il)

GOLDGUR, YEHUDA - Chemistry  
Ph.D., The Weizmann Inst., 1998  
Research Interests: X-ray crystallography of  
Proteins, nucleic acids and their complexes.  
Protein-nucleic acid interactions.  
[ygoldgur@bgu.ac.il](mailto:ygoldgur@bgu.ac.il)

GOLDSHTEIN, VLADIMIR-Mathematics  
Ph.D., Novosibirsk State Univ., 1971  
Research Interests: Functional analysis.  
Analysis on manifolds.  
Quasiconformal mappings. Chemical  
engineering science.  
[vladimir@math.bgu.ac.il](mailto:vladimir@math.bgu.ac.il)

GOREN, SHAUL - Physics  
Ph.D., McMaster Univ., Canada, 1968  
Research Interests: Nuclear magnetic  
resonance .  
Spin relaxation. Superconductivity.  
[shaulg@bgu.ac.il](mailto:shaulg@bgu.ac.il)

GORODETSKY, GAD - Physics  
Ph.D., The Weizmann Inst., 1968  
Research Interests: Ultrasonics. Magnetism.  
Thin films.  
[gorodet@bgu.ac.il](mailto:gorodet@bgu.ac.il)

GORODETSKY, MALKA - Chemistry &  
Education  
Ph.D., The Hebrew Univ., 1964  
Research Interests: Chemical education.  
Problem solving in science. Teachers'  
Development. School interventions.  
[malka@bgu.ac.il](mailto:malka@bgu.ac.il)

GRANOT, YOSEF – Life Sciences  
Ph.D., The Hebrew Univ., 1973  
Research Interests: Signal transduction  
regulated biochemical functions induced by  
growth factors and peptide hormones.  
Tyrosine kinase activity of growth factor  
receptors. Inhibitors of the tyrosine kinase  
activity as regulators of cell biochemical  
functions. The mitogen activated protein  
kinases as targets for novel chemotherapeutics.  
[ygranot@bgu.ac.il](mailto:ygranot@bgu.ac.il)

GRINBERG, SARINA - Chemistry  
Ph.D., Weizmann Institute of Science, 1981  
Research Interests: Synthetic organic  
chemistry. Vegetable oils as renewable  
resources for new oleochemicals. Synthesis of  
new amphiphilic compounds. Novel  
nanovesicles for targeted drug delivery.  
Soluble polymer-bound PTCs.  
[sarina@bgu.ac.il](mailto:sarina@bgu.ac.il)

GUDES, EHUD - Computer Science  
Ph.D., Ohio State University, 1976  
RESEARCH INTERESTS: Data Bases. Data  
Security. Data Mining.  
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GUENDELMAN, EDUARDO - Physics  
Ph.D., Mass. Inst. Tech., U.S.A. 1985  
Research Interests: Elementary particles.  
Gravity theory. Quantum field theory .  
Cosmology.  
[guendel@bgu.ac.il](mailto:guendel@bgu.ac.il)

GUREVICH, NADYA - Mathematics  
Ph.D., The Weizmann Inst., 2000  
Research Interests: Automorphic forms.  
L-functions. Representation theory.  
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HORMADALY, JACOB –Chemistry  
Ph.D., The Hebrew Univ., 1977  
Research Interests: Inorganic glasses. Glass  
chemistry and spectroscopy of rare earth and  
transition metal ions in glasses. Crystallization  
of glasses. Property composition relations in  
glass. Lead-free glasses. Solid state chemistry.  
Conducting oxides. Thick film materials and  
technology . Lead-free thick film resistors and  
sensors. Glasses for thick film materials.  
Electrical conduction mechanisms of thick film  
resistors.  
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HATZOR, YOSSEF H. - Geological  
& Environmental Sciences  
Ph.D., Univ. of California, Berkeley, 1992  
Research Interests: Geological engineering.  
Rock mechanics, Block theory. Mechanical  
behavior of rocks. Rock slope stability.  
Tunneling. Discontinuous deformation  
analysis (DDA).  
[hatzor@bgu.ac.il](mailto:hatzor@bgu.ac.il)

HOROVITZ, BARUCH - Physics  
Ph.D., The Hebrew Univ., 1976  
Research Interests: Condensed matter physics.  
Phase transitions. Statistical mechanics.  
[baruch@bgu.ac.il](mailto:baruch@bgu.ac.il)

HENDLER, DANNY- Computer Science  
Ph.D, Tel-Aviv University, 2001  
RESEARCH INTERESTS: Distributed  
computing, Parallel computing  
[hendlerd@cs.bgu.ac.il](mailto:hendlerd@cs.bgu.ac.il)

HOROWITZ, YIGAL - Physics  
Ph.D., McGill Univ., Canada., 1968  
Research Interests: Radiation physics.  
Radiation Induced thermoluminescence.  
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HERSONSKY, SA'AR-DAVID -  
Mathematics  
Ph.D., Univ. of Illinois at Chicago, 1994  
Research Interests: Hyperbolic manifolds  
Riemann surfaces and Teichmüller theory.  
[saarh@math.bgu.ac.il](mailto:saarh@math.bgu.ac.il)

ISSAR, ARIE S. – (emeritus) Geological  
& Environmental Sciences  
Ph.D., The Hebrew Univ., 1961  
Research Interests : Hydrogeology of arid  
basins. Hydrological aspects of  
paleoclimate and climatic changes.  
[issar@bgu.ac.il](mailto:issar@bgu.ac.il)

HIRSHBERG, ILAN - Mathematics  
Ph.D., University of California at Berkeley,  
2003.  
Research Interests: Operator algebras.  
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ITAI, CHANAN – Life Sciences (retired)  
Ph.D., The Hebrew Univ., 1968  
Research Interests: Stress physiology.  
Regulation of plant response to the  
Environment : drought, temperature and  
salinity. Stomatal physiology.  
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JELINEK, RAZ - Chemistry  
Ph.D., Univ. of California, Berkeley, 1993.  
Research Interests: Biophysics. Biological  
sensors. Nuclear magnetic resonance  
spectroscopy (NMR). Proteins and peptides.  
razj@bgu.ac.il.

JUNG, GRZEGORZ - Physics  
Ph.D., Inst. of Phys. of the Polish Acad. of  
Sci., 1980 Research Interests:  
Superconductivity. Noise.  
jung@bgu.ac.il

KAGAN-ZUR, VARDA – Life Sciences  
Ph.D., Ben-Gurion Univ., 1970  
Research Interests: Molecular biology of  
Mycorrhiza and truffle cultivation.  
zur@bgu.ac.il

KASHKUSH, KHALIL – Life Sciences  
Ph.D., Weizmann Institute, 2003  
Research Interests: Genomics, Epigenomics  
and Genome Evolution. Biodiversity of  
polyploid plants. Polyploidy regulation of  
gene expression

KATZ, BENJAMIN - Chemistry  
D.Sc., The Technion, 1967  
Research Interests: Physical chemistry.  
Molecular dynamics. Laser chemistry.  
Spectroscopy. Use of colloid semiconductors  
in biophysical systems.  
benikatz@bgu.ac.il

KATZ, MATYA - Computer Science  
Ph.D., Tel-Aviv University, 1995  
RESEARCH INTERESTS: Computational Geometry  
(CG) – theory and applications; geometric software.  
Theoretical work in CG focusing on optimization  
algorithms, and devising efficient geometric data  
structures and algorithms for input models tailored to  
real-world data. Issues in Computer Graphics, GIS,  
Wireless communication networks, Facility location  
and layout of VLSI circuits and Robotics.  
[matya@cs.bgu.ac.il](mailto:matya@cs.bgu.ac.il)

KATZIR, YARON - Geological  
& Environmental Sciences Ph.D., The Hebrew Univ.,  
1998  
Research Interests: Igneous and metamorphic  
petrology. Stable isotope geochemistry. Tectonics of  
orogens focused on the Alpine-  
Himalayan and the Pan-African orogen.  
ykatzir@bgu.ac.il

KEASAR, CHEN – Computer Sciences  
& Life Sciences  
Ph.D., The Hebrew Univ., 1998  
Research Interests: Bioinformatics, mainly  
focusing on the attempt to break the  
("second level") of the genetic code,  
the coding of structure and function by amino  
acid sequences.  
[keasar@cs.bgu.ac.il](mailto:keasar@cs.bgu.ac.il)

KEDEM, KLARA - Computer Science  
Ph.D., Tel-Aviv University, 1989  
RESEARCH INTERESTS: Computational geometry.  
Computer Vision. Shape Resemblance. Geometric  
Aspects of Computational Biology: Proteins, RNA.  
[klara@cs.bgu.ac.il](mailto:klara@cs.bgu.ac.il)

KHODORKOVSKY, VLADIMIR - Chemistry  
Ph.D., Riga Technical Univ., 1986.  
Research Interests: Synthesis of organic  
compounds with unusual physical properties:  
Organic metals. Non-linear optics. Supra-molecular  
chemistry.  
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KHODORKOVSKY, VLADIMIR -  
Chemistry  
Ph.D., Riga Technical Univ., 1986.  
Research Interests: Synthesis of organic  
compounds with unusual physical properties:  
Organic metals. Non-linear optics.  
Supra-molecular chemistry.  
hodor@bgu.ac.il

KIFLAWI, MOSHE – Life Sciences,  
The Interuniversity Inst. for Marine  
Sciences in Eilat.  
Ph.D.: Univ. of New Mexico, USA, 1999.  
Research Interests: Community &  
evolutionary ecology. Early life-history  
of coral-reef fish.  
mkiflawi@bgu.ac.il

KISCH, HANAN J. - (emeritus)  
Geological & Environmental Sciences  
D.Sc., Univ. of Amsterdam, 1962  
Research Interests: Very-low-grade  
metamorphism and burial diagenesis:  
Phyllosilicates replacement; illite/phengite  
'crystallinity'; Coalification; Carbonic fluid-  
inclusion geothermometry and -barometry;  
Mica lattice parameters and P/T gradients;  
composition of phyllosilicates; Development  
of slaty and crenulation cleavage:  
Morphology of cleavage fragments,  
microfabric, quantification of cleavage  
intensity; Marginal zones of orogenic belts  
(Scandinavian Caledonides, Western Alps,  
Hellenides, Early Archaean). Rock-forming  
minerals; especially amphiboles and  
phyllosilicates; Metamorphic microfabrics;  
Lattice-preferred orientation by x-ray  
diffraction.  
[kisch@bgu.ac.il](mailto:kisch@bgu.ac.il)

KOJMAN, MENACHEM - Mathematics  
Ph.D., The Hebrew Univ., 1994  
Research Interests: Infinite combinatorics.  
Model theory. Infinite graph theory. PCF  
theory. Topology and forcing.  
kojman@math.bgu.ac.il

KORN, CHARLES - Physics  
Ph.D., The Weizmann Inst., 1972  
Research Interests: Nuclear magnetic resonance.  
High Tc superconductors.  
korn@bgu.ac.il

KOST, DANIEL - Chemistry  
Ph.D., Tel Aviv Univ., 1970  
Research Interests: Physical organic chemistry.  
Stereochemistry, N.M.R. spectroscopy.  
Hypervalent silicon complexes, charge-transfer  
molecular complexes. Molecular orbital analysis  
of structure and mechanism.  
kostd@bgu.ac.il

KRICHEVSKY, OLEG - Physics  
Ph.D., The Weizmann Inst., 1996  
Research Interests: Biological physics. Condensed  
matter  
physics. Physics of complex fluids.  
oleg@bgu.ac.il

LEMCOFF, N. GABRIEL  
Born: 1969, Argentina  
Ph.D.: 2002, Tel-Aviv University  
Senior Lecturer, October 2004 .  
Research Interests: Synthetic Organic  
Chemistry,  
Dendrimer and Polymer Chemistry, Polymer  
analysis, Cross-linking strategies,  
Supramolecular Chemistry, Ruthenium  
Olefin Metathesis,  
Polyacetal virtual dynamic combinatorial  
libraries and Molecular Modeling.  
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LEVIN, MICHAEL - Mathematics  
Ph.D., Haifa Univ., 1993  
Research Interests: Topology.  
mlevine@math.bgu.ac.il

LIBERSAT, FREDERIC – Life Sciences  
Ph.D., Univ. of Bordeaux, 1986  
Research Interests: Neural basis of animal  
behavior. Neuronal plasticity.  
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LIN, MICHAEL - Mathematics  
Ph.D., The Hebrew Univ. 1971  
Research Interests: Operator ergodic theory.  
Markov processes. Functional analysis.  
lin@math.bgu.ac.il

LIKHTENSHTEIN, GERTZ -(emeritus)  
Chemistry  
D.Sc., Inst. Chem. Phys., Moscow, 1972  
Research Interests: Chemical biophysics.  
Mechanism of enzyme catalysis. Structure  
and dynamics of proteins and biomembranes.  
Biosensors.  
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LIVSIC, MOSHE - (emeritus) Mathematics  
Ph.D., Univ. of Odessa, 1942  
Research Interests: Operator theory.  
Determinantal curves system theory.  
livsic@math.bgu.ac.il

LOMONOSOV, MICHAEL - Mathematics  
Ph.D., IPPI, Moscow, 1975  
Research Interests: Combinatorial optimization,  
Graph Theory, Probabilistic networks  
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MANASSEN, YISHAY - Physics  
Ph.D., Tel-Aviv Univ., 1988  
Research Interests: Scanning probe microscopy .  
Nanomagnetism. Kinetics of epitaxial growth .  
Nano-device fabrication. Development of new  
scanning probe techniques. Corrosion of heavy metal.  
manassen@bgu.ac.il

MANOR, YAIR – Life Sciences  
Ph.D., The Hebrew Univ., 1995  
Research Interests: Focus on mechanisms of  
generation and regulation of rhythmic activity in  
neural networks.  
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MARKUS, ALEXANDER - (emeritus) Mathematics  
Ph.D., Univ. of Baku, USSR, 1959  
Research Interests: Operator theory.  
Functional analysis.  
Matrix theory.  
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MARGALITH, JOEL – Life Sciences  
(emeritus)  
Ph.D., The Hebrew Univ., 1975  
Research Interests: Biological control of  
pests, ecology and epidemiology of  
mosquito producing ecosystems.  
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MEDALIA, OHAD – Life Sciences, NIBN  
Ph.D., Weizmann Inst., 2002  
Research Interests – Cryo-EM. Cryo-  
tomography of cells and organelles.  
Structure analysis of the nuclear transport  
machinery. Cytoskeletal architecture.  
[omedalia@bgu.ac.il](mailto:omedalia@bgu.ac.il)

MEIR, YIGAL - Physics  
Ph.D., Tel-Aviv Univ. 1988.  
Research Interests: Condensed matter theory .  
Mesoscopics and many body problems.  
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MEIJLER, MICHAEL – Chemistry  
Ph.D., Weizmann Inst., 2003  
Research Interests: Bioorganic Chemistry.  
Organic chemistry. Molecular recognition.  
Quorum Sensing. Bacterial-Eukaryotic  
Communication. Anti-Cancer Agents.  
[meijler@scripps.edu](mailto:meijler@scripps.edu)

MELKMAN, AVRAHAM - Computer  
Science  
Ph.D., University of California at Berkeley,  
1971  
RESEARCH INTERESTS: Bioinformatics,  
Clustering algorithms for microarrays,  
functional prediction.  
[melkman@cs.bgu.ac.il](mailto:melkman@cs.bgu.ac.il)

MERON, EHUD - Physics-  
Ph.D., The Weizmann Inst., 1986  
Blaustein Inst. for Desert Research  
Research Interests: Nonlinear dynamics and pattern  
formation. Physics of complex systems. Theoretical  
ecology.  
[ehud@bgu.ac.il](mailto:ehud@bgu.ac.il)

MEISELS, AMNON - Computer Science  
Ph.D. in Physics, Ben Gurion University, 1979  
RESEARCH INTERESTS: Constraints Processing.  
Distributed Constraints. Timetabling problems.  
Distributed Timetabling.  
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METZLER, RALF  
Dr. rer. nat., University of Ulm, 1996  
Research interests: Biological and soft matter physics;  
DNA physics: DNA-breathing, DNA conformations,  
DNA knots; Gene regulation, target search,  
optimization; Statistical mechanics of equilibrium and  
nonequilibrium systems; Stochastic processes:  
Subdiffusion, Levy motion, Continuous time random  
walks; Complex chemical reaction dynamics;  
Mathematical modelling: Fractional equations and  
solutions  
[metz@nordita.dk](mailto:metz@nordita.dk)

MEYERSTEIN, DAN - (emeritus) Chemistry  
Ph.D., The Hebrew Univ., 1965  
Research Interests: Inorganic chemistry. Catalysis.  
Radical  
chemistry. Redox processes. Complexes with metal  
carbon bonds.  
Bioinorganic chemistry  
[danmeyer@bgu.ac.il](mailto:danmeyer@bgu.ac.il)

MISHMAR, DAN – Life Sciences, NIBN  
Ph.D., The Hebrew Univ., 2000  
Research Interests: Population genetics of human  
mitochondrial genetic variation. Genetics of age  
related disorders: type II diabetes and age-related  
macular degeneration. Mitochondrial evolution.  
[dmishmar@bgu.ac.il](mailto:dmishmar@bgu.ac.il)

MIZRAHI, YOSEF – Life Sciences  
Ph.D., The Hebrew Univ., 1972  
Research Interests: Introduction of wild  
fruit trees as crops to desert areas.  
Production under salinity. Biology of  
cacti. Nonripening mutants. Secondary  
metabolites from exotic edible fruits  
[mizrahi@bgu.ac.il](mailto:mizrahi@bgu.ac.il)

MOALEM, AMNON - Physics  
Ph.D., Tel-Aviv Univ., 1972  
Research Interests: Nuclear reaction and  
nuclear structure: Meson hydroproduction.  
CP and CTP violations in 1020)MeV)  
decays. Chiral theory of vectors. Nuclear  
medicine . Pseudoscalars and baryons.  
[moalem@bgu.ac.il](mailto:moalem@bgu.ac.il)

MORDECHAI, SHAUL - Physics  
Ph.D., The Hebrew Univ., 1972  
Research Interests: Optical diagnostics and  
medical  
informatics.  
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MOREH, RAYMOND - (emeritus)  
Physics Ph.D., The Hebrew Univ., 1965  
Research Interests: Nuclear physics. Surface  
physics . Scanning tunneling microscope.  
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NISSIM, KOBBI - Computer Science  
Ph.D., Weizmann Institute, 2001  
RESEARCH INTERESTS: Cryptography,  
Data Privacy  
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OVADIA, OFER – Life Sciences  
Ph.D., Ben-Gurion Univ., 1999  
Research Interests: Developing analytical theory and  
computational models linking evolutionary biology  
and population/ community ecology. Using molecular  
techniques and arthropod communities as a model  
system to investigate links between trait (e.g.  
morphology, behavior and life history) variation and  
population/ community dynamics.  
[oferovad@bgu.ac.il](mailto:oferovad@bgu.ac.il)

OWEN, DAVID - Physics  
Ph.D., The Johns Hopkins Univ., 1970  
Research Interests: Quantum electro-dynamics .  
Field theory. Kaluza-Klein. General relativity .  
Dark matter.  
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PAKOVICH, FEDOR - Mathematics  
Ph.D., Inst. Fourier, Grenoble Univ., 1997  
Research Interests: Complex analysis. Number theory.  
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PAROLA, ABRAHAM - Chemistry  
Ph.D., Brandeis Univ., 1974  
Research Interests: Biophysical chemistry.  
Biochemistry. Membrane dynamics. Single  
photon and phase modulation  
spectrofluorometry. Viral transformation.  
Tryptophanase (Tnase): quaternary structure  
vs. activity: protein-protein recognition; Cold  
inactivation, its role in cell-cell  
communication and biofilm formation; x-ray  
crystallography of its wt, holo, apo and  
mutants from E coli; TNase inhibitors as  
potential new generation of antibiotics.  
Adenosine deaminase in SCID, AIDS and as  
a malignancy marker. Adenosine deaminase  
complexing protein (ADCP=CD26=DPPIV).  
Ciliary motion, signaling membrane  
dynamics. Protein reconstituted in liposomes:  
cholesterol and temperature effect.  
Antiangiogenic drugs and bFGF.  
Electrostatic vs. hydrophobic interactions in  
wt vs. point mutated bFGFs. Cell cycle and  
membrane domains: DnaA. Apoptosis.  
Diagnostics: determination of fetal lung  
maturity by non-invasive methods;  
determination of drug levels in body-fluids  
by 3D fluorescence. Bioelectromagnetics:  
environmental- powerlines EMF and stress  
effect on higher plants; EMF induce alignant  
cell transformation role of radical  
scavengers.  
aparola@bgu.ac.il

PELLY, ITHAMAR – (retired) Geological  
& Environmental Sciences  
Ph.D., The Hebrew Univ., 1967  
Research Interests: Analytical geochemistry.  
Applied geochemistry and mineralogy.  
Thermal analysis. Heating stage microscopy.  
Environmental chemistry.  
Neutralization of acidic  
sludges using coal fly ash.  
ipelly@bgu.ac.il

PERETZ, RONEN - Mathematics &  
Computer Science  
Ph.D., The Technion, 1989 Research Interests:  
Algebraic geometry. Polynomial mappings. Complex  
analysis (extremal problems, geometric function  
theory,  
circle packing).  
[ronenp@math.bgu.ac.il](mailto:ronenp@math.bgu.ac.il)

PINES, EHUD - Chemistry  
Ph.D., Tel-Aviv Univ., 1989  
Research Interests: Laser spectroscopy of  
ultrafast phenomena. Ultrafast bimolecular  
reaction dynamics in solution. Acid-base  
processes in inhomogeneous aqueous media  
and at surfaces of macromolecules.  
Non-specific (medium) control of biological  
reactivity.  
epines@bgu.ac.il

PINSHOW, BERRY - Life Sciences & Mitrani Dept. of Desert Ecology (BIDR)  
Ph.D., Duke Univ., 1975  
Research Interests: Physiological ecology of desert animals; energy and water exchange between animals and the environment; thermoregulation and osmoregulation in desert animals; body composition and water and energy balances of birds and bats, particularly with respect to flight and migration.  
pinshow@bgu.ac.il

POLAK, MICHA - Chemistry  
Ph.D., Tel-Aviv Univ., 1975  
Research Interests: Surface science: Surface segregation and ordering (SRO, LRO) in binary and ternary alloys including nano-clusters (statistical mechanical computations of compositions structures and heat capacity). Surface analysis by electron spectroscopies (XPS, AES).  
mpolak@bgu.ac.il

PRIEL, ZVI - Chemistry  
Ph.D., Weizmann Inst., 1970  
Research Interests: Physical chemistry and biophysics. Ciliary motion. Signal transduction. Intercellular  $\text{Ca}^{2+}$ . Macromolecules. Colloids. Surface science.  
alon@bgu.ac.il

PROSS, ADDY - Chemistry  
Ph.D., Univ. of Sydney, 1970  
Research Interests: Physical organic chemistry. Theoretical organic chemistry. Application of qualitative models for understanding organic reactivity. Origin of life. Mechanism for emergence of biological-complexity.  
pross@bgu.ac.il

RABINOVITCH, AVINOAM - Physics  
D.Sc., The Technion, 1969  
Research Interests: Biological physics . Nonlinear dynamics. Fracture physics.  
avinoam@bgu.ac.il

RAVEH, DINA – Life Sciences  
Ph.D., Weizmann Inst., 1976  
Research Interests: Genome stability: Link between the DNA damage response and the ubiquitin-proteasome system of protein degradation. Protein quality control.  
raveh@bgu.ac.il

RICH, DANIEL - Physics  
Ph.D., The Univ. of Illinois at Urbana-Champaign, 1989  
Research Interests: Experimental condensed matter physics Semiconductor thin films. Optical and structural properties of quantum nanostructures.  
danrich@bgu.ac.il

ROSENWAKS, (ZAMIK) SALMAN - Physics  
Ph.D., The Hebrew Univ., 1972  
Research Interests: Electro-optics. Lasers, Atmospheric processes. Laser controlled reactions. Chemical lasers ,  
Molecular dynamics.  
zamik@.bgu.ac.il

RUBIN, MATATYAHU - Mathematics  
Ph.D., The Hebrew Univ., 1976  
Research Interests: Mathematical logic. Set theoretic topology complexity of algorithms.  
[matti@math.bgu.ac.il](mailto:matti@math.bgu.ac.il)

RUBINSTEIN, ISAAK - Mathematics  
Ph.D., The Latvian Acad. of Science, 1973  
Research Interests: Theory of transport processes and applications to semiconductors and chemical engineering.  
[robinst@math.bgu.ac.il](mailto:robinst@math.bgu.ac.il)

SAGI, AMIR – Life Sciences  
Ph.D., The Hebrew Univ., 1989  
Research Interests: Comparative and applied endocrinology. Regulation of crustacean reproduction and growth.  
[sagia@bgu.ac.il](mailto:sagia@bgu.ac.il)

SCHARF, BENJAMIN - Chemistry  
Ph.D., Tel Aviv Univ., 1969  
Research Interests: Theoretical chemical physics. Molecular spectroscopy. Vibronic coupling.  
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SEGEV, RONEN – Life Sciences  
Ph.D., Tel Aviv University, 2002  
Research Interests: The neural code of the retina, vision.

SEGEV, YOAV - Mathematics  
Ph.D., The Hebrew Univ. 1985  
Research Interests: Finite groups. Finite geometries. Combinatorial topology.  
[yoavs@math.bgu.ac.il](mailto:yoavs@math.bgu.ac.il)

SEN, RATHINDRA NATH - (emirtus)  
Mathematics  
Ph.D., The Hebrew Univ., 1963  
Research Interests: Mathematical consequences of relativistic causality. The relation between mathematics and physics  
[rsen@math.bgu.ac.il](mailto:rsen@math.bgu.ac.il)

SHAANAN, BOAZ – Life Sciences  
Ph.D., Tel-Aviv Univ., 1979  
Research Interests: Structure determination of biological macromolecules by X-ray crystallography and structure-function studies. Current specific interests: Structure-function studies on: ACT-domain containing enzymes (acetohydroxy acid synthase, threonine deaminase): Poorly conserved ORFs (PCOs) from halophilic archaea. Protein kinases. Membrane proteins (VDAC).  
[bshaanan@bgu.ac.il](mailto:bshaanan@bgu.ac.il)

SHAGAM, REGINALD - (retired) Geological & Environmental Sciences  
Ph.D., University of Princeton, 1956  
Research Interests: Large scale tectonics, particularly origin of mountain belts with special focus on the Andes in Venezuela and Colombia.  
[rahagam@bgu.ac.il](mailto:rahagam@bgu.ac.il)

SHAKED, HAGAI - (emeritus) Physics  
Ph.D., Univ. of California, USA, 1963  
Research Interests: Condensed matter. Crystal and magnetic structures. Neutron scattering  
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SHANI, ARNON – (emeritus) Chemistry  
Ph.D., Weizmann Inst., 1965  
Research Interests: Organic chemistry.  
Chemical communication (pheromones).  
Natural products. Jojoba utilization. Organic  
photochemistry. Applied chemistry.  
[ashani@bgu.ac.il](mailto:ashani@bgu.ac.il)

SHAPIRA, MICHAL – Life Sciences  
Ph.D., Weizmann Inst., 1985  
Research Interests: 1) Translation regulation  
in trypanosomatids: (a) the general translation  
machinery. RNA structure as a thermosensor  
mechanism that directs stage-specific gene  
expression. 2) Redox control of gene  
expression in the chloroplast  
[shapiram@bgu.ac.il](mailto:shapiram@bgu.ac.il)

SHAPIRO, JESSE M. - (emeritus)  
Mathematics & Statistics  
Ph.D., Univ. of Minnesota, 1954  
Research Interests: Probability & Statistics.  
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SHIMONY, EYAL - Computer Science  
Ph.D., Brown University, 1991  
RESEARCH INTERESTS: Artificial  
Intelligence. Probabilistic Reasoning.  
Application of Probabilistic Reasoning to  
Search, Constraint Satisfaction, Data Mining,  
Robotics, Pattern Recognition (Vision, Sonar  
Sensing), AI and Law, Spatial Databases.  
Bounded Rationality and Flexible  
Computation (Anytime Algorithms).  
[shimony@cs.bgu.ac.il](mailto:shimony@cs.bgu.ac.il)

SHOSHAN-BARMATZ, VARDA –  
Life Sciences, NIBN Director Ph.D., Weizmann Inst.,  
1978  
Research Interests: Coupling mechanism for ATP-  
dependent ion transport. Ryanodine receptor/ Ca<sup>2+</sup>  
release channel. ATP transport in synaptic vesicles.  
Ca<sup>2+</sup> transport in mitochondria. Crosstalk between  
cellular compartments. Mitochondrial VDAC:  
structure-function, apoptosis and cancer.  
[vardasb@bgu.ac.il](mailto:vardasb@bgu.ac.il)

SHUKER, REUBEN - Physics  
Ph.D., Catholic Univ. of America, 1971  
Research Interests: Quantum optics .  
Laser without inversion. Nonlinear optics .  
Raman scattering in solids. Lasers. Discharges and  
modelling and optogalvanic effect and spectroscopy .  
Atomic physics .  
[shuker@bgu.ac.il](mailto:shuker@bgu.ac.il)

SIPPER, MOSHE – Computer Science  
Ph.D., Tel-Aviv University, 1995  
RESEARCH INTERESTS: Evolutionary computation,  
Bio-inspired computing, Complex biological networks,  
and AI & games.  
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SIVAN, ORIT - Geological & Environmental Sciences  
Ph.D., Hebrew University, Jerusalem, 2003  
Research Interests: Environmental geochemistry of  
groundwater and porewater.  
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SOD-MORIAH, URIEL – Life Sciences  
(retired)  
Ph.D., Cornell Univ., 1965  
Research Interests: The effects of high  
ambient temperature and pesticides on  
reproduction of mammals and  
thermoregulation.  
[s-moriah@bgu.ac.il](mailto:s-moriah@bgu.ac.il)

STEINITZ, RAPHAEL - Physics  
Ph.D., The Univ. of Leiden, Holland, 1964  
Research Interests: Astrophysics. Solar  
physics .  
Magnetic fields. Chemical abundances.  
Stellar coronae .  
Stellar winds. Diamagnetic effects.  
Dielectronic  
recombination. Spin correlation in binaries.  
Sociobiological aspects of aggression.  
Violence and human culture behaviour.  
[raphael@bgu.ac.il](mailto:raphael@bgu.ac.il)

TAL, MOSHE – Life Sciences (emeritus)  
Ph.D., Univ. of California, 1965  
Research Interests: The role of the  
active oxygen species and the  
antioxidative system in the  
mechanism of stress tolerance.  
Genetics and physiology.  
[motal@bgu.ac.il](mailto:motal@bgu.ac.il)

TANNENBAUM, EMANUEL – Chemistry  
Ph.D.: Harvard Univ., 2002, USA  
Research Interests: Theory of DNA  
mutation and repair. Biological network  
modeling. Dynamics. Extensions of  
quasispecies multicellular organisms. Cell  
differentiation and communication.  
[emanuelt@bgu.ac.il](mailto:emanuelt@bgu.ac.il)

THIEBERGER, REUBEN - (emeritus) Physics  
Ph.D., The Weizmann Inst., 1958  
Research Interests: Non-linear dynamics .  
Astrophysics. Statistical mechanics .  
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Ph.D., Inst. for Low Temperatures, Kharkov, 1966  
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Differential operators.  
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Ph.D., The Hebrew Univ., 1994  
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sex determination and fruit development.  
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Ph.D., Kazan State Univ., 1967  
D.Sc., State Univ. of Tartu, 1975  
Research Interests: Molecular magnetism, magnetic  
interactions in metal clusters, mixed valency and  
double exchange. Vibronic interactions and  
Jahn-Teller effect in molecules and crystals. Optical  
properties of molecules, transition metal complexes

and impurity centers in doped crystals. Group theory and theory of the irreducible tensor operators

with application to the problems of spectroscopy

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Algebraic geometry.

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Interactions of ion channels with scaffold proteins underlying synapse formation, maintenance and function.

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Ph.D., The Weizmann Inst. 1958  
Research Interests: Nonlinear dynamics . Solar energy. Stochastic processes.

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