

FACULTY MEMBERS

ABDU, URI - Life Sciences

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

ABRAHAM, URI - Mathematics & Computer Science

Ph.D., The Hebrew University, 1979

Research Interests: Set theory. Mathematical logic. Concurrency (in Computer Science).

abraham@math.bgu.ac.il

ABRAMOVICH, SIGAL - Geological & Environmental Sciences

Ph.D., Princeton University, 2002

Research Interests: Foraminiferal ecology, taxonomy, and molecular phylogeny. Marine Biomonitoring, and paleoceanography.

sigalabr@bgu.ac.il

ABRAMSKY, ZVIKA - Life Sciences (Emeritus)

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

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

AHARONI, AMIR - Life Sciences

Ph.D., The Weizmann Institute, 2002

Research Interests: Engineering proteins with new functions. Engineering proteins for new binding activities to study complex biological processes. Generation of enzymes with new catalytic properties.

aaharoni@bgu.ac.il

AHARONY, AMNON - Physics (Emeritus)

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

AKABAYOV, BARAK - Chemistry

Ph.D., Weizmann Inst. 2007

Research Interests: Biochemistry, Biophysics, Structural Dynamics, Structural Based Lead Discovery, Nucleic Acid-Protein Interactions, Protein-Protein Interactions, DNA replication

akabayov@post.bgu.ac.il

ALFONTA, LITAL - Life Sciences

Ph.D., Hebrew University of Jerusalem, 2003

Research Interests: Electrochemical Activity of Microorganisms, Bioelectrochemistry, Redox Protein Engineering, In Vitro Translation of proteins and Genetic Code Expansion.

alfontal@bgu.ac.il

ALPAY, DANIEL - Mathematics

Ph.D., The Weizmann Institute, 1985

Research Interests: Operator theory system theory. Interpolation problems. Riemann surfaces.

dany@math.bgu.ac.il

ALTSHULER, AMOS - Mathematics (Emeritus)

Ph.D., The Hebrew University, 1970

Research Interests: Convex polytopes. Graph theory. Combinatorial topology.

alt@math.bgu.ac.il

ARBELY, EYAL - Chemistry, NIBN

Ph.D., The Hebrew Univ., 2007

Research interests: Synthetic biology and genetic code expansion. Directed evolution of proteins and enzymes with new functions. Peptide antibiotics.

arbely@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

AVISHAI, YSHAI - Physics (Emeritus)

Ph.D., The Weizmann Inst., 1970

Research Interests: Theoretical. condensed matter physics

yshai@bgu.ac.il

BACHMAT, EITAN - Computer Science

Ph.D., Massachusetts Institute of Technology, U.S.A. 1994

Research Interests: Performance Analysis. Storage Systems, Applied probability, Autism research.

ebachmat@cs.bgu.ac.il

BAHAT, DOV -Geological & Environmental Sciences (Emeritus)

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

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

BAND, YEHUDA – Chemistry (Emeritus)

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

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

BAR-SADAN, MAYA - Chemistry

Ph.D., Weizmann Institute of Science, 2007

Research Interests: Hybrid nanoparticles, Atomic interfaces, Atomic resolution electron microscopy, 2D materials, Materials Chemistry

barsadan@bgu.ac.il

BAR-TOUV, YAACOV - Physics (Emeritus)

Ph.D., The Weizmann Inst., 1966

Research Interests: Nuclear physics. Mesoscopic physics.

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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

BARAK, ZE'EV - Life Sciences (Emeritus)

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

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

BECKER, JAMES Y - Chemistry (Emeritus)

Ph.D., The Hebrew Univ., Jerusalem, 1973

Research Interests:

1) Organic electrochemistry - Synthesis, properties and mechanisms:

a) Organosilicon compounds;

b) Functionalization of organic molecules;

c) Electrocatalysis;

d) Electrochemistry in ionic liquids.

2) Molecular organic conductors: synthesis, structure, charge-transfer complexes and ion-radical salts, conductivity, electrochemistry and spectral properties;

3) Spectroscopy and electrochemistry of organic complexes of biologically important metal cations

becker@bgu.ac.il

BEIMEL, AMOS - Computer Science

D.Sc., Technion, Haifa, 1996

Research Interests: Cryptography. Complexity Theory.

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

BELITSKII, GENRICH - Mathematics (Emeritus)

Ph.D., Kharkov, 1966

Research Interests: Local theory of dynamical systems. Functional equations. Smooth dynamical systems.

genrich@math.bgu.ac.il

BEN-ABRAHAM, SHELOMO I.- Physics (Emeritus)

Ph.D., The Czechoslovak Acad. of Sciences, 1961.

Research Interests: Condensed matter. Statistical Mechanics.

benabr@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

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.

ben-shahar@cs.bgu.ac.il

BEN ZVI, ANAT - Life Sciences, NIBN

Ph.D., The Hebrew University, 2003

Research Interests: how protein quality control is maintained and why it fails in a living, multicellular organism

anatbz@bgu.ac.il

BEREND, DANIEL - Mathematics, Computer Science

Ph.D., Hebrew University, 1982

Research Interests: Combinatorial Optimization. Applied Probability and Statistics. Decision-Making. Number Theory.

berend@cs.bgu.ac.il

BERNSTEIN, JOEL - Chemistry (Emeritus)

Ph.D., Yale Univ., 1967

Research Interests: General and structural chemistry. Solid state chemistry. Chemical crystallography, polymorphism, hydrogen bonding, graph set analysis.

yoel@bgu.ac.il

BERSHTEIN, SHIMON - Life Sciences

Ph.D., Weizmann Institute of Science, 2007

Research interests: Molecular evolution, Protein biophysics, Systems biology, Biomolecular interactions

bershteins@gmail.com

BESSER, AMNON – Mathematics

Ph.D., Tel-Aviv Univ., 1994

Research Interests: Arithmetical algebraic geometry

bessera@math.bgu.ac.il

BIRNBAUM, RAMON - Life Sciences

Ph.D., Ben-Gurion Univ., 2009

Research Interests: Functional characterization of gene regulatory elements in the genome and their association with human diseases.

ramonb@bgu.ac.il

BITTNER, SHMUEL - Chemistry (Emeritus)

Ph.D., The Hebrew Univ., 1965

Research Interests: Organic synthesis. Natural products. Quinocchemistry. Quinonyl amino acids.

bittner@bgu.ac.il

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

BRAFMAN, RONEN I. - Computer Science

Ph.D., Stanford University, 1996

Research interest: Automated Planning and Decision Making. Decision Support Systems. Modeling and Reasoning about Preferences. Multi-Agent and Distributed Planning.

brafman@cs.bgu.ac.il

BRANDENBURSKY, MICHAEL – mathematics

Ph.D., Technion, 2010

Research Interests: Knot Theory, Symplectic Geometry and Low-dimensional Topology, Braid groups, mapping class groups, groups of diffeomorphisms, Geometric group theory

BROTMAN, YARIV - Life Sciences

Ph.D., Bar-Ilan Univ., 2005

Research Interests: lipidomics and metabolomics analysis of plants. quantitative genetics of metabolic traits. Metabolic transcriptomic network analysis.

Brotman@mpimp-golm.mpg.de

BRUSTEIN, RAM - Physics

.Ph.D., Tel Aviv Univ

Research Interests: Theoretical high-energy physics, cosmology. Astro-particle physics.

ramyb@bgu.ac.il

CARMI, PAZ- Computer Science

Ph.D., Ben Gurion University, 2006

Research Interests: Computational geometry - theory and applications. Within computational geometry my research is focused on approximations, optimization problems, facility location, radio and sensor networks, and spanners.

carmip@cs.bgu.ac.il

CHAYOTH, REUBEN - Life Sciences (Retired)

Ph.D., The Hebrew Univ., 1971

Research Interests: Science education.

rchayoth@netvision.net.il

CHIPMAN, DAVID - Life Sciences (Emeritus)

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

CHLAMTAC, EDEN- Computer Science

Ph.D., Princeton University, 2009

Research Interests: Theoretical computer science, approximation algorithms, convex optimization, lift-and-project methods.

CODISH, MICHAEL - Computer Science

Ph.D., Weizmann Institute of Science, 1991

Research Interests: Semantic Based Program Analysis.

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

COHEN, MIRIAM- Mathematics (Emeritus)

Ph.D., Tel-Aviv University, 1976

Research Interests: Noncommutative algebras. Hopf algebras .Quantum groups.

mia@math.bgu.ac.il

DABOUL, JAMIL - Physics (Retired)

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

DAVIDSON, AHARON – Physics (Emeritus)

D.Sc., The Technion, 1977

Research Interests: Gravity. Cosmology. Dark matter. Higher dimensional field theory. Electro/nuclear interactions.

davidson@bgu.ac.il

DINITZ, YEFIM - Computer Science

Ph.D., Institute of Mathematical Economics, Moscow, 1973

Research Interests: Graph algorithms. Network flows. Combinatorial algorithms. Distributed computing. Pattern recognition in data access logs. Imbedding and layout of interconnection networks. Visualization of algorithms.

dinitz@cs.bgu.ac.il

DINUR, ITAI – Computer Science

Ph.D., Weizmann Institute of Science, 2013

Research Interests: Cryptography. Computer security.

itai.dinur@ens.fr

DINUR, URI - Chemistry

Ph.D., The Hebrew Univ., 1979

Research Interests: Theoretical physical chemistry. Molecular interactions.

uridinur@bgu.ac.il

DOLEV ,SHLOMI - Computer Science

D.Sc. Technion, IIT, 1992

Research Interests: Distributed Algorithms. Communication Networks. Fault-Tolerance. Self-Stabilization. Cryptography. Optical computing. Coding Theory, and Brain Science.

dolev@cs.bgu.ac.il

DUBI, YONATAN - Chemistry

Ph. D., Ben-Gurion University, 2007

Research Interests: Energy transport and conversion in nano-scale systems. Complex electronic material

dubij76@gmail.com

EFRAT, IDO - Mathematics

Ph.D., Tel-Aviv University, 1990

Research Interests: Theory of fields. Profinite groups. Galois theory

efrat@math.bgu.ac.il

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

EICHLER, JERRY - Life Sciences

Ph.D., Weizmann Inst., 1994

Research Interests: Archaea. Post-translational modifications. Protein Glycosylation. Protein translocation.

jeichler@bgu.ac.il

EISENBERG, THEODORE - Mathematics (Emeritus)

Ph.D., Univ. of Maryland, 1970

Research Interests: Mathematical education. Curriculum development/Evaluation math. Spatial visualization/Concept formation.

eisen@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

ELIA, NATALIE - Life Sciences, NIBN

Ph.D., The Hebrew University of Jerusalem, 2006

Research Interests: Understanding the kinetics and the 3D organization of protein complexes in cells is key to understanding cellular mechanisms.

elianat@post.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

EL SANA, JIHAD - Computer Science

Ph.D. ,.State University of New York, 1999

Research Interests :Computer Graphics, Human Computer Interaction, Image Processing, Augmented Reality, Geometric Modeling, and Document Image Analysis .

el-sana@cs.bgu.ac.il

ENTIN-WOHLMAN, ORA – Physics (Emeritus)

Ph.D., Bar-Ilan Univ. 1973

Research Interests: Theoretical condensed matter physics.

entin@post.tau.ac.il

EYAL, MOSHE - Geological & Environmental Sciences (Retired)

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

EYAL, YEHUDA -Geological & Environmental Sciences (Emeritus)

Ph.D., The Hebrew Univ., 1976

Research Interests : Structural geology; paleo-stress analysis of Israel and Okanagan 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 - Physic

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.

FEINGOLD, MARIO - Physics

Ph.D., The Technion, 1986

Research Interests: Single molecule and cell Biophysics.

mario@bgu.ac.il

FEINSTEIN, SHIMON - Geological & Environmental Sciences (Retired)

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

FEINTUCH, AVRAHAM - Mathematics

Ph.D., Univ. of Toronto, 1972

Research Interests: Operator theory. Linear systems. Optimal control.

abie@math.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

Ph.D., Univ. of Sverdlovsk, 1979

D.Sc., Warsaw, 1991

Research Interests: Functional analysis. Geometry of Banach spaces.

fonf@math.bgu.ac.il

FRUMKER, EUGENE- Physics

Ph.D, Weizmann Institute, 2007

Research Interests: Nanoscience with Attosecond Pulses

efromker@bgu.ac.il

FUHRMANN, PAUL A. - Mathematics (Emeritus)

Ph.D., Columbia Univ., 1967

Research Interests: Mathematical theory of control systems. Operator theory in Hilbert space

paf@math.bgu.ac.il

GABRIYELIAN, SAAK – mathematics

Ph.D., Kharkov State University, 1992

Research Interests: Topological groups (general theory), abstract harmonic analysis, topological dynamics

saak@math.bgu.ac.il

GANOR, JIWCHAR - Geological & Environmental Sciences

Ph.D., The Hebrew Univ., 1992

Research Interests: Environmental Geochemistry. 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.

gedalin@bgu.ac.il

GPSANI, MORDECHAI - Life Sciences (Retired)

Ph.D., The Hebrew Univ. 1980

Research Interests: Phenotypic 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 competing plants.

gersani@bgu.ac.il

GERSTEN, ALEXANDER - Physics (Emeritus)

Ph.D., The Weizmann Inst., 1967

Research Interests: Foundation of quantum physics. Applications of physics in medicine.

gersten@bgu.ac.il

GERTSBAKH, ILYA - Mathematicis (Emeritus)

Ph.D., The Latvian Acad. of Sciences, 1964

Research Interests: Applied probability & statistics. Operations research. Reliability theory.

elياهو@math.bgu.ac.il

GHEBER, LEAH - Chemistry and Clinical Biochemistry

Ph.D., Ben-Gurion University, 1995

Research Interests: molecular motors, single molecule proteins studies, mitosis, cell-cycle regulation, microtubules, cancer, real-time fluorescence imaging, Fluorescence Recovery After Photobleaching (FRAP) on living cells

lgheber@bgumail.bgu.ac.il

GILL, DAVID - Physics (Emeritus)

Ph.D., The Weizmann Inst., 1958

Research Interests: Biological physics.

dgill@bgu.ac.il

GLASER, ROBERT - Chemistry (Emeritus)

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

GLASNER, YAIR - Mathematics

Ph.D Hebrew university of Jerusalem, 2002

Research Interests: Arboreal group theory, graph theory, p-adic Lie groups and their lattices.

yairgl@math.bgu.ac.il

GOLDBERG, MAYER - Computer Science

Ph.D., Indiana University, 1996

Research Interests: Programming languages, lambda Calculus & combinatory logic, functional programming, threaded code, interactive proof assistants.

gmayer@cs.bgu.ac.il

GOLDSHTEIN, VLADIMIR-Mathematics (Emeritus)

Ph.D., Novosibirsk State Univ., 1971

Research Interests: Functional analysis. Analysis on manifolds. Quasiconformal mappings. Chemical engineering science.

vladimir@math.bu.ac.il

GOLOMB, DAVID - Physiology and Neurobiology, Physics

Ph.D., The Hebrew Univ., 1991

Research Interests: Theoretical and computational neuroscience. Nonlinear dynamics of neuronal networks and systems. Information processing in the somatosensory system.

golomb@bgu.ac.il

GOREN, LIRAN - Geological & Environmental Sciences

Ph.D. Weizmann Institute of Science 2010

Research interests: Earth surface and near surface dynamics. Long term landscape evolution with applications to tectonic geomorphology, mechanics of coupled grains and pore fluid systems, and the mechanics of shear zones in landslides and faults.

liran.goren@gmail.com

GOREN, SHAUL - Physics (Emeritus)

Ph.D., McMaster Univ., Canada, 1968

Research Interests: Nuclear magnetic resonance. Spin relaxation. Superconductivity.

shaulg@bgu.ac.il

GORODETSKY, GAD - Physics (Emeritus)

Ph.D., The Weizmann Inst., 1968

Research Interests: Ultrasonics. Magnetism. Thin films.

gorodet@bgu.ac.il

GORODETSKY, MALKA - Chemistry & Education (Emeritus)

Ph.D., The Hebrew Univ., 1964

Research Interests: Chemical education. Problem solving in science. Teachers' Development. School interventions.

malka@bgu.ac.il

GRANOT, ROI - Geological & Environmental Sciences

Ph.D., Scripps Institution of Oceanography, UCSD, 2009

Research Interests: Global plate tectonics, Construction of the oceanic crust and the Geomagnetic field

rgranot@bgu.ac.il

GRANOT, YOSEF - Life Sciences (Emeritus)

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

GROSFELD, EYTAN - Physics

Ph.D - Weizman Institute of Science – 2002

Research Interests: Topological phases in condensed matter systems, including p-wave superconductors, topological insulators, and the quantum Hall effect.

grosfeld@illinois.edu

GUDES, EHUD - Computer Science (Emeritus)

Ph.D., Ohio State University, 1976

Research Interests: Data Bases. Data Security. Data Mining.

ehud@cs.bgu.ac.il

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

GUR, EYAL - Life Sciences, NIBN

Ph.D., Tel Aviv University, 2005

Research Interests: Protein quality control mechanisms in Bacteria

gure@bgu.ac.il

GUREVICH, NADYA - Mathematics

Ph.D., The Weizmann Inst., 2000

Research Interests: Automorphic forms. L-Function.

ngur@math.bgu.ac.il

HASSON, ASSAF - Mathematics

Ph.D., Hebrew university of Jerusalem, 2004

Research Interests: Model theory

hassonas@math.bgu.ac.il

HATZOR, YOSSEF H. - Geological & Environmental Sciences

Ph.D., Univ. of California, Berkeley, 1992

Research Interests: Rock mechanics, Rock slope stability, Tunneling, Discontinuous deformation analysis (DDA), Earthquake engineering, Mechanical and petrophysical behavior of carbon rich chalks, Shear strength of rock joints.

hatzor@bgu.ac.il

HAVIV, ITAI - Geological & Environmental Sciences

Ph.D., The Hebrew Univ. of Jerusalem., 2008

Research Interests: Tectonic geomorphology, low-temperature thermochronology, surface processes and geodynamics. Interactions between surface processes, climate and tectonics. Orogenic processes. Waterfalls mechanics. Bedrock channel evolution.

haviv@bgu.ac.il

HENDLER, DANNY- Computer Science

Ph.D, Tel-Aviv University, 2001

Research Interests: Distributed computing: distributed algorithms and lower bounds, multi-core systems, transactional memory, scalable shared-memory synchronization, dynamic load-balancing, local-spin mutual exclusion.

Communication networks: packet classification using content-addressable-memory, machine learning: time-series anomaly detection.

hendlerd@cs.bgu.ac.il

HIRSHBERG, ILAN - Mathematics

Ph.D., University of California at Berkeley, 2003.

Research Interests: Operator algebras.

ilan@math.bgu.ac.il

HOLANDER ,SHARON- Mathematics

Ph.D., Massachusetts Institute of Technology, 2011

Research Interests: Algebraic Topology, Algebraic Geometry, Algebraic K-Theory

sjh@math.bgu.ac.il

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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HOROVITZ, BARUCH – Physics (Emeritus)

Ph.D., The Hebrew Univ., 1976

Research Interests: Condensed matter physics. Phase transitions. Statistical mechanics.

baruch@bgu.ac.il

HOROWITZ, YIGAL - Physics (Emeritus)

Ph.D., McGill Univ., Canada., 1968

Research Interests: Radiation physics. Radiation Induced thermoluminescence.

yigal@bgu.ac.il

ISSAR, ARIE S. - Geological & Environmental Sciences (Emeritus)

Ph.D., The Hebrew Univ., 1961

Research Interests : Hydrogeology of arid basins. Hydrological aspects of paleoclimate and climatic changes.

issar@bgu.ac.il

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.

itai@bgu.ac.il

JELINEK, RAZ - Chemistry

Ph.D., Univ. of California, Berkeley, 1993.

Research Interests: Biomimetic chemistry, biosensors, cell membranes, nanoparticles.

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 (Retired)

Ph.D., Ben-Gurion Univ., 1970

Research Interests: Molecular biology of Mycorrhiza and truffle cultivation.

zur@bgu.ac.il

KAMAI, RONNIE – Structural Engineering, Geological & Environmental Sciences

Ph.D., University of California, Davis. 2011

Research Interests: Geotechnical Earthquake Engineering, Seismic Hazards, Ground Motions, Site Response.

rkamai@bgu.ac.il

KAMENESKY, MOSHE – Mathematics

Ph.D., The Hebrew University, 2007

Research Interests: model theory, algebraic geometry, valued fields, differential and difference equations, and representation theory.

kamenskm@math.bgu.ac.il

KAMYSHNY, ALEXEY - Geological & Environmental Sciences

Ph.D., The Hebrew University of Jerusalem, 2006

Research Interests: Aquatic biogeochemistry. Analytical biogeochemistry. Low temperature geochemistry. Stable isotope geochemistry. Environmental geochemistry. Biogeochemical cycles of sulfur and selenium in modern and ancient oxygen depleted aquatic systems. Modern lakes as analogs for ancient Earth's ocean. Reactions of anthropogenic pollutants with reduced sulfur species.

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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

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KATZ, BENJAMIN - Chemistry (Emeritus)

D.Sc., The Technion, 1967

Research Interests: Physical chemistry. Molecular dynamics. Laser chemistry. Spectroscopy. Use of colloid semiconductors in biophysical systems.

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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

KATZIR, YARON - Geological & Environmental Sciences

Ph.D., The Hebrew Univ., 1998

Research Interests: Igneous and metamorphic petrology. Stable and radiogenic isotope geochemistry. Tectonics of orogens focused on the Alpine-Himalayan chain and the Pan-African orogen.

ykatzir@bgu.ac.il

KEASAR, CHEN – Computer Science, life science

Ph.D., Hebrew University, 1997

Research Interests: Structure prediction of proteins. An attempt to break the "Second Level" of the genetic code, that is, the coding of structure and function by amino acid sequences.

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KEDEM, KLARA - Computer Science (Emeritus)

Ph.D., Tel-Aviv University, 1989

Research Interests: Computational geometry, computer vision, graphics, and image processing

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KERNER, DMITRY – Mathematics

Ph.D., Tel Aviv University, 2007

Research Interests: Algebraic Geometry, Singularity Theory, Commutative Algebra

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KESHET, URI - Physics

Ph.D - Weizman Institute of Science – 2001

Research Interests: Astrophysics, Collisional Shocks, Galaxy Clusters.

ukeshet@cpa.harvard.edu

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. - Geological & Environmental Sciences (Emeritus)

D.Sc., Univ. of Amsterdam, 1962

Research Interests :Very-low-grade metamorphism and burial diagenesis. Metamorphic microfabrics. Metamorphic white micas: illite/phengite 'crystallinity', lattice parameter b_0 and metamorphic P/T gradients, chemical composition, Na/K micas, deconvolution of XRD reflections . Slaty and crenulation cleavage - development and quantification of intensity. Lattice-preferred orientation. Metamorphism in marginal zones of orogenic belts: Scandinavian Caledonides, Western Alps, Hellenides, Archaean greenstone belts. Rock-forming minerals, especially amphiboles and phyllosilicates.

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KOJMAN, MENACHEM - Mathematics

Ph.D., The Hebrew Univ., 1994

Research Interests: Infinite combinatorics. Model theory. Infinite graph theory. PCF theory. Topology and forcing.

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KONTOROVICH, ARYEH – Computer Science

Ph.D., Carnegie Mellon University, 2007

Research Interests: Probability theory: concentration of measure, mixing. Statistics, empirical processes. Machine learning theory: algorithms and generalization bounds in metric spaces. Automata theory: kernel methods for learning languages.

karyeh@cs.bgu.ac.il

KORN, CHARLES - Physics (Retired)

Ph.D., The Weizmann Inst., 1972

Research Interests: Nuclear magnetic resonance. High Tc superconductors.

korn@bgu.ac.il

KOZUCH, SABASTIAN - Chemistry

Ph.D., The Hebrew Univ. 2009

Research Interests: Quantum Chemistry, Catalysis, Kinetics, Organometallic Chemistry, Electronic Structure, Quantum Mechanical Tunneling, Cross-Coupling Reactions, Nanocatalysis.

kozuch@post.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 - Chemistry

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.

lemcoff@bgu.ac.il

LEVIN, MICHAEL - Mathematics

Ph.D., Haifa Univ., 1993

Research Interests: Topology.

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LIBERSAT, FREDERIC - Life Sciences

Ph.D., Univ. of Bordeaux, 1986

Research Interests: Neural basis of animal behavior. Neuronal plasticity.

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LIKHTENSHEIN, GERTZ - Chemistry (Emeritus)

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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LIN, MICHAEL - Mathematics (Emeritus)

Ph.D., The Hebrew Univ. 1971

Research Interests: Operator ergodic theory. Markov processes. Functional analysis.

lin@math.bgu.ac.il

LUBLINSKY, MICHAEL – Physics

PhD, The Technion, 2002,

Research Interests: Theoretical high energy/nuclear physics.

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LUKATSKY, DAVID (DIMA)- Chemistry

Ph.D., Weizmann Inst., 2003

Research Interests: Physical chemistry and biophysics. Design Principles of Protein Interaction Specificity. Promiscuity and Plasticity in Protein Interaction Networks. Biological Self-assembly.

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LYUBARSKY, YURI – Physics

PhD, Space Research Institute, Moscow, 1984

Research Interests: High energy astrophysics. Plasma astrophysics. Relativistic magneto-hydrodynamics.

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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.

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MANEVICH, ROMAN - Computer Science

Ph.D., Tel-Aviv University, 2009

Research Interests: Programming Languages, Formal Verification, Static Analysis by Abstract Interpretation, Shape Analysis, Program Synthesis, Concurrent Programming.

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MARKIEWICZ, DANIEL - Mathematics

Ph.D., UC Berkeley, 2002

Research Interests: Operator algebras

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MARKUS, ALEXANDER - Mathematics (Emeritus)

Ph.D., Univ. of Baku, USSR, 1959

Research Interests: Operator theory. Functional analysis. Matrix theory.

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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

MEIDAN, DGANIT- Physics

Ph.D, Weizmann inst. – 2009

Research interests : Condensed matter theory

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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.

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MEIR, YIGAL - Physics

.Ph.D., Tel-Aviv Univ. 1988

Research Interests: Condensed matter theory. Mesoscopics and many body problems.

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MEISELS, AMNON - Computer Science

Ph.D. in Physics, Ben Gurion University, 1979

Research Interests: Constrained Agents – Search, Cooperation & Coordination; Boolean games.

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MELKMAN, AVRAHAM - Computer Science (Emeritus)

Ph.D., in Physics, University of California at Berkeley, 1971

Research Interests: Bioinformatics, Algorithms for Boolean networks.

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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.

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MEYEROVITCH, TOM- Mathematics

Ph.D., Tel Aviv University, 2009

Research Interests: symbolic dynamics, ergodic theory and probability

mtom@math.bgu.ac.il

MEYERSTEIN, DAN - Chemistry (Emeritus)

Ph.D., The Hebrew Univ., 1965

Research Interests: Inorganic chemistry. Catalysis. Radical chemistry. Redox processes. Complexes with metal carbon bonds. Bioinorganic chemistry

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MILLER, YIFAT - Chemistry

Ph.D., Hebrew University of Jerusalem, 2007

Research Interest: Amyloids, Self-assembly of peptides, Neurodegenerative diseases, type II diabetes.

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MILO, ANAT - Chemistry

Ph.D. Weizmann Institute 2011

Research Interests: Catalysis, CO₂ activation, Physical Organic Chemistry, Non-Covalent Interactions, Chirality, Origin of Life, Selectivity, Mathematical Modeling, Biomimetic Processes, Functional Organic Materials, High-throughput, Data-intensive (Big Data), Stereochemistry, Mechanistic Studies, Kinetic Isotope Effects.

MISHMAR, DAN - Life Sciences

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.

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MIZRAHI, YOSEF - Life Sciences (Emeritus)

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

MOALEM, AMNON - Physics (Emeritus)

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.

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MOKARI, TALEB - Chemistry

Ph.D. Hebrew University, 2006

Research Interests: Nanoscience and Nanotechnology. Synthesis and characterization of novel nanostructures. Renewable energy: Fuel Cells (Hydrogen and Methanol), photo-voltaic (PV). Studying the toxicity of nanomaterials and developing new models to predict their impact on the environment.

MORDECHAI, SHAUL - Physics (Emeritus)

Ph.D., The Hebrew Univ., 1972

Research Interests: Optical diagnostics and medical informatics.

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MOREH, RAYMOND - Physics (Emeritus)

Ph.D., The Hebrew Univ., 1965

Research Interests: Nuclear physics. Surface physics. Scanning tunneling microscope.

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NEIMAN, OFER - Computer Science

Ph.D., Hebrew University, 2009

Research Interests: Theoretical computer science, more specifically combinatorics, discrete geometry, metric spaces, and their application to computer science and algorithms

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NEVO, ERAN - Mathematics

Ph.D., Hebrew University, 2007

Research Interests: Combinatorics and its connections to commutative algebra, topology, geometry and convexity.

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NIR, EYAL - Chemistry

Ph.D., The Hebrew Univ., 2004

Research Interests: Biophysics, Physical-Chemistry. Proteins and DNA- Structure Dynamics Interaction and Function, Protein-Folding, DNA Mechanical Properties. Understanding Biological Processes on Molecular Level. Developing Methods in Single-Molecule Fluorescence Spectroscopy, Photo-Physics.

enir@bgu.ac.il

NISSIM, KOBBI - Computer Science

Ph.D., Weizmann Institute, 2001

Research Interests: Cryptography, Data Privacy

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ONN, URI - mathematics

Ph.D., Technion, 2003

Research Interests: Representation theory

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OPPENHEIM, IZHAR – mathematics

Ph.D, Technion, 2012

Research Interests: geometric group theory

OREN, SIGAL- Computer Science

Ph.D., Cornell University, 2013

Research Interests: Algorithmic social science, Social Networks, Algorithmic game theory, Theoretical computer science

sigal3@gmail.com

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.

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OWEN, DAVID - Physics (Emeritus)

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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PAPPO, DORON- Chemistry

Ph.D. Tel-Aviv University, 2006

Research Interests: Organic Chemistry, Synthetic Methodology, Catalysis, Total Synthesis of Natural Products, Supramolecular Chemistry.

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PAROLA, ABRAHAM - Chemistry (Emeritus)

Ph.D., Brandeis Univ., 1974

Research Interests: Biophysical chemistry. Membrane dynamics. Membrane lipid-protein interaction. Single photon and phase modulation spectrofluorometry. Tryptophanase (Tnase): quaternary structure vs. activity: cold and high pressure inactivation; biofilm formation; TNase inhibitors as antibiotics, Adenosine deaminase complexing protein (ADCP=CD26=DPPIV) and ADA as a malignancy marker Antiangiogenic drugs. Cell cycle and membrane domains: DnaA and macromolecular crowding. Apoptosis, necrosis and autophagy. Diagnostics: determination of fetal lung maturity by non-invasive methods; determination of drug levels in body-fluids by 3D fluorescence. Bioelectromagnetics

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PELLY, ITHAMAR - Geological & Environmental Sciences (Retired)

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

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

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) (Emeritus)

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 (Emeritus)

Ph.D., Tel-Aviv Univ., 1975

Research Interests: Surface Chemistry: surface segregation and ordering (SRO, LRO) in binary and ternary alloys including nano-clusters (Statistical Mechanical computations of site-specific compositional structures). Nano-Chemistry : Modeling of nano-chemical equilibrium in Small groups of molecules (Statistical Mechanical formulation and computations); Chemical kinetics in small groups.

mpolak@bgu.ac.il

POLIAKOVSKY, ARKADY- Mathematics

Ph.D., Technion - Israel Institute of Technology, 2005

Research Interests: Nonlinear Analysis, Calculus of Variations, Functions of Bounded Variation, Elliptic Partial Differential Equations, Conservation Laws, Micromagnetics, Problems in Elasticity, Navier-Stokes Equations and General Nonlinear Evolutions

poliakov@math.bgu.ac.il

PRIEL, ZVI - Chemistry (Emeritus)

Ph.D., Weizmann Inst., 1970

Research Interests: Physical chemistry and biophysics. Ciliary motion. Signal transduction. Intercellular Ca^{2+} . Macromolecules. Colloids. Surface science.

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PROSS, ADDY - Chemistry (Emeritus)

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. Chemical nature of life. Mechanism for emergence of biological complexity.

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RABINOVITCH, AVINOAM - Physics (Emeritus)

D.Sc., The Technion, 1969

Research Interests: Biological physics. Nonlinear dynamics. Fracture physics.

avinoam@bgu.ac.il

RAVEH, DINA - Life Sciences (Retired)

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 (Emeritus)

Ph.D., The Hebrew Univ., 1972

Research Interests: Electro-optics. Lasers, Atmospheric processes. Laser controlled reactions. Chemical lasers, Molecular dynamics.

zamik@bgu.ac.il

ROTLAT, BARAK -Life Sciences

Ph.D., Tel-Aviv University

Research Interests: Long noncoding RNA, translation, Tumor suppressors

barak.rotlat@gmail.com

RUBIN, MATATYAHU - Mathematics (Emeritus)

Ph.D., The Hebrew Univ., 1976

Research Interests: Mathematical logic. Set theoretic topology complexity of algorithms.

matti@math.bgu.ac.il

RUBIN, NATAN - Computer Science

Ph.D., Tel Aviv University, 2012

Research Interests: Discrete and Computational Geometry, Algorithms and Combinatorics, The Probabilistic Method, Combinatorial Optimization.

rubinnat@cs.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

SABATO, SIVAN – Computer Science

Ph.D., Hebrew University, 2013

Research Interests: Machine learning theory and applications

SAGI, AMIR - Life Sciences, NIBN

Ph.D., The Hebrew Univ., 1989

Research Interests: Comparative and applied endocrinology. Regulation of crustacean reproduction and growth.

sagia@bgu.ac.il

SAYAG, EITAN- Mathematics

Ph.D. Tel Aviv University, 2003

Research Interests: Number theory, Automorphic Forms, Harmonic Analysis on Symmetric Spaces, Representation Theory of p-adic groups

sayage@math.bgu.ac.il

SCHARF, BENJAMIN - Chemistry (Emeritus)

Ph.D., Tel Aviv Univ., 1969

Research Interests: Theoretical chemical physics. Molecular spectroscopy. Vibronic coupling.

scharf@bgu.ac.il

SCHECHTER, MOSHE – Physics

Ph.D., The Weizmann Institute, 2002

Research Interests: Theoretical condensed matter physics: Quantum magnetism, Disordered and amorphous systems, Glasses.

smoshe@bgu.ac.il

SEGEV, RONEN - Life Sciences

Ph.D., Tel Aviv University, 2002

Research Interests: The neural code of the retina, vision.

ronensgv@bgu.ac.il

SEGEV, YOAV - Mathematics

Ph.D., The Hebrew Univ. 1985

Research Interests: Finite groups. Finite geometries. Combinatorial topology.

yoavs@math.bgu.ac.il

SEN, RATHINDRA NATH - Mathematics (Emeritus)

Ph.D., The Hebrew Univ., 1963

Research Interests: Physical applications of bundle theory. Quantum field theory. Physical fibre applications of algebraic topology.

rsen@math.bgu.ac.il

SHAANAN, BOAZ - Life Sciences (Retired)

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

SHAKED, HAGAI - Physics (Emeritus)

Ph.D., Univ.of California, USA, 1963

Research Interests: Condensed matter. Crystal and magnetic structures. Neutron scattering

hshaked@bgu.ac.il

SHAMIR, MAOZ - Physiology & Neurobiology, and Physics

Ph.D., The Hebrew University of Jerusalem, 2005.

Research Interest: Neural coding of information. Stochastic dynamics of learning and plasticity in the brain.

shmaoz@bgu.ac.il

SHANI, ARNON - Chemistry (Emeritus)

Ph.D., Weizmann Inst., 1965

Research Interests: Organic chemistry. Chemical communication (pheromones). Natural products. Jojoba utilization. Organic photochemistry. Applied chemistry.

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

SHAPIRO, JESSE M. - Mathematics (Emeritus)

Ph.D., Univ. of Minnesota, 1954

Research Interests: Probability & Statistics.

jesse@math.bgu.ac.il

SHARF ANDREI - Computer Science

Ph.D., Tel-Aviv University, 2007

Research Interests: Computer graphics and geometric modeling, in particular: surface reconstruction, interactive techniques, geometry processing, shape matching and registration, computational topology, parallel data structures, GPGPU.

asharf@cs.bgu.ac.il

SHASHAR, NADAV- Life Sciences, Eilat Campus

Ph.D., Univ. of Maryland- 1997

Research interests : Vision in marine animals, Polarization vision, coral reef preservation, artificial coral reefs, marine animals behavior, dolphins behaviour.

nadavsh@bgu.ac.il

SHAY, TAL - Life Sciences

Ph.D., Weizmann Institute of Science, 2008

Research Interests: Computational immunology, Evolution of the immune system

talshay@bgu.ac.il

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), Decision-making under uncertainty.

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^{2+} release channel. ATP transport in synaptic vesicles. Ca^{2+} transport in mitochondria. Crosstalk between cellular compartments. Mitochondrial VDAC: structure-function, apoptosis and cancer.

vardasb@bgu.ac.il

SHRIKI, OREN – Cognitive and Brain Sciences & Computer Science

Ph.D., The Hebrew Univ., 2004

Research Interests: computational neuroscience, neurological and psychiatric disorders, machine learning, brain-machine interfaces.

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SHUKER, REUBEN - Physics (Emeritus)

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

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SIPPER, MOSHE - Computer Science

Ph.D., Tel-Aviv University, 1995

Research Interests: Current research focuses on evolutionary computation, mainly as applied to software development and games. Past interests include: bio-inspired computing, cellular automata, cellular computing, artificial self-replication, evolvable hardware, artificial life, artificial neural networks, fuzzy logic, and robotics.

sipper@cs.bgu.ac.il

SIVAN, ORIT - Geological & Environmental Sciences

Ph.D., Hebrew University, Jerusalem, 2003

Research Interests: Isotopic environmental geochemistry of groundwater and porewater.

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SMORODINSKY, SHAKHAR - Mathematics

Ph.D., Tel Aviv University, 2003

Research Interests: Computational and combinatorial geometry, sensor and wireless networks, online algorithms, discrete math.

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STEINITZ, RAPHAEL - Physics (Retired)

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

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.

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THIEBERGER, REUBEN - Physics (Emeritus)

Ph.D., The Weizmann Inst., 1958

Research Interests: Non-linear dynamics. Astrophysics. Statistical mechanics.

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TKACHENKO, VADIM - Mathematics (Emeritus)

Ph.D., Inst. for Low Temperatures, Kharkov, 1966

D.Sc., Steklov Inst., Leningrad, 1982

Research Interests: Theory of functions. Differential operators.

tkachenk@math.bgu.ac.il

TOIBER, DEBORAH - Life Sciences

Ph.D., Hebrew University of Jerusalem 2009

Research Interests: Molecular mechanism of DNA damage, epigenetic modifications and chromatin remodeling, and its link to brain health and neurodegeneration.

toiber@bgu.ac.il

TSESARSKY, MICHAEL - Geological & Environmental Sciences; joint appointment with Structural Engineering.

Ph.D., Ben Gurion Univ., 2004

Research Interests: Seismic waves propagation and ground motion analysis, Bio-mediated soil improvement, Geomaterials, Geomechanics.

michatse@bgu.ac.il

TSUKERBLAT, S. BORIS - Chemistry (Emeritus)

Ph.D. Kazan state University 1967

D.Sc. State University 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 and molecular magnetism.

tsuker@bgu.ac.il

TSUR, DEKEL- Computer Science

Ph.D, Tel-Aviv University, 2002

Research Interests: Bioinformatics, String algorithms

dekelts@cs.bgu.ac.il

TYOMKIN, ILYA - Mathematicis

Ph.D, Tel Aviv University, 2004

Research interests: Algebraic geometry

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VARDI, AMICHAY - Chemistry

Ph.D., The Weizmann Inst., 1999

Research Interests: Theoretical atomic, molecular and optical physics. Theoretical chemical physics; Bose-Einstein condensation. Nonlinear and quantum atom-optics. Molecular and coupled atom-molecule condensates. Quantum dynamics of Bose-Josephson systems. Collective processes in quantum-degenerate gases. Photoassociation. Ultracold molecules. Theory of adiabatic population transfer. Laser modified tunneling.

avardi@bgu.ac.il

VINEGAR, HAROLD – Geological & Environmental Sciences

Ph.D., Harvard University, 1976

Research Interests: Petroleum Geosciences; Petrophysics and Formation Evaluation; In Situ Thermal Recovery; Oil Shales and Unconventional Resources; In Situ Environmental Reclamation

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VINNIKOV, VICTOR - Mathematics

Ph.D., Ben-Gurion Univ., 1988

Research Interests: Operator theory system theory. Algebraic geometry.

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WEINBERGER, RAM - Geological & Environmental Sciences

Ph.D., The Hebrew Univ., 1998

Research Interests: Structural Geology, Fracture mechanics, Tectonics of the Dead Sea Fault, Salt tectonics and the geology of Sedom Diapir, Magnetic AMS applications

rami.weinberger@gsi.gov.il

WEINSTOCK, IRA ALAN - Chemistry

Ph.D.: Mass. Inst. of Tech., 1990, USA

Research Interests: Inorganic, coordination chemistry and nanoscience, including green chemistry and catalysis, fundamental studies in structure and reactivity of molecular and nanoscale systems, and the synthesis of soft inorganic materials.

iraw@bgu.ac.il

WEISS, GERA- Computer Science

Ph.D., The Weizmann Institute of Science, 2006

Research Interests: Formal-methods, Mathematical control theory, Software engineering, Embedded systems, Distributed systems, and Combinatorial-games.

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WEISS, SAMUEL - Chemistry (Emeritus)

Ph.D., The Hebrew Univ., 1964

Research Interests: Physical chemistry. Molecular spectroscopy, processes in the picosecond range via IR spectroscopy.

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WITZTUM, ALLAN - Life Sciences (Emeritus)

Ph.D., Cornell Univ., 1966

Research Interests: Plant structure. Lemnaceae. Acanthaceae. Seed dispersal.

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YADIN , ARIEL - Mathematics

Ph.D., Weizmann Institute of Science, 2009

Research Interests: Probability, random spatial processes, random walks, Schramm-Loewner Evolution, random height-functions, discrete complex and harmonic analysis

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YEKUTIELI, AMNON - Mathematics

Ph.D., MIT, 1990

Research Interests: Algebraic geometry noncommutative algebra.

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YIFRACH, OFER - Life Sciences

Ph.D., Weizmann Inst., 1999

Research Interests: Molecular basis for electrical signaling in the nervous system. Voltage-dependent ion channels. Interactions of ion channels with scaffold proteins underlying synapse formation, maintenance and function.

ofery@bgu.ac.il

ZACCAI, MICHELE - Life Sciences

Ph.D., Weizmann Inst., 1992

Research Interests: Physiological and Molecular aspects of flowering. Flowering control and quality of Ornamental plants. Plant genetic Engineering .

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ZALTZMAN, BORIS - Mathematics

Ph.D., Novosibirsk State Univ., 1989

Research Interests: Theory of transport processes and applications to phase transitions and semiconductors.

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ZANGEN, ABRAHAM - Life Sciences

Ph.D., Bar-Ilan University, 2000

Research Interests: to better understand mechanisms by which the brain reward system affects mood and motivation and how this system is altered in states like addiction and depression or their potential therapies.

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ZARITSKY, ARIEH - Life Sciences (Emeritus)

Ph.D., Univ. of Leicester, 1971

Research Interests: Biological control of mosquitoes . Bacterial physiology and genetics.

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ZARIVACH, RAZ - Life Sciences, NIBN

Ph.D., The Weizmann Institute of Science, 2005

Research Interests: Structure function studies of biological macromolecules.

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Inst. for Desert Research

Ph.D., The Weizmann Inst. 1958

Research Interests: Nonlinear dynamics.Solar energy. Stochastic processes

ZILBERBERG, NOAM - Life Sciences

Ph.D., Tel-Aviv Univ., 1997

Research Interests: Biophysics of Potassium channels . Potassium leak. The interactions of neurotoxins with ion channels.

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ZIV, YARON - Life Sciences

Ph.D., Univ. of Arizona, 1998

Research Interests: Population ecology. Community ecology. Landscape ecology and Conservation biology.

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Ph.D, Haifa University, 2003

Research Interests: Bioinformatics, String Algorithms, Combinatorial Pattern Matching, RNA Structure, Information Retrieval.

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