DMP NEWSLETTER
Division of Materials Physics

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CALL FOR INVITED SPEAKER SUGGESTIONS

Please find below the Division of Materials Physics Focused Topic program for the 2001 APS March Mtg. (Seattle, WA; March 12-16, 2001) . Focused Topics include a number of sessions per topic with typically 1 invited speaker per session. The rest of the session consists of contributed presentations. If you would like to make suggestions for invited speakers, please contact the appropriate organizers (listed below) by Friday, Sept 1, 2000. The format for your suggestions is free-style, but please include a title, a brief descriptive paragraph, and the name, address, telephone and fax number of both the proposed speaker and the nominator. Contributed (and invited speaker) abstracts are due Dec. 1, 2000 at APS; contributors are welcome to send a duplicate copy to the organizers listed below, but please be sure to send the original to APS, on time, being sure that abstract conforms to APS regulations.

DATES TO REMEMBER:

Sept. 1, 2000:
Suggestions for Invited Speakers to organizers

Dec. 1, 2000:
Abstracts Due at APS Headquarters

March 12-16, 2001:
March Mtg. in Seattle, WA

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CALL FOR ABSTRACTS

DMP Focus Topics for March 2001 (listed by sorting category)

Hydrogen in Materials (DMP) — 1.9.1, 2.9.1, 4.9.6, 13.9.1

A fundamental understanding of the interaction of hydrogen with metals, semiconductors, ceramics, polymers, and nanostructured materials poses numerous challenges. These include an understanding of the hydrogen site preference, structural distortion created in the host material following hydrogen adsorption, strength of hydrogen bonding, and its effect on mechanical, electrical, optical, magnetic, and transport properties of the host. The technological importance of high density hydrogen storage and hydrogen embrittlement further adds to the need for a comprehensive understanding of the hydrogen interaction in materials. Due to recent efforts in storing hydrogen in nanostructured materials, it is timely to have a focussed session on Hydrogen in Materials not only to address some of the unsolved old issues, but to focus on the novel properties of hydrogen interacting with materials of reduced size and dimension. The focussed sessions will deal with the theoretical as well as experimental problems involving synthesis/processing, characterization, and properties.

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Nanoscale Silicon Structures and Devices (DMP/FIAP) — 2.9.2

Strong interest in the physical properties of nanoscale silicon has been stimulated by the necessity to understand the physics of the transition from a micron-sized, bulk-like object to nanometer-sized silicon based structures and devices. The evolution of the microelectronics industry in the past decades has shown that this transition will be unavoidable. The purpose of this session is to bring together scientists and engineers working in the materials physics and device applications of nanoscale silicon based structures. Emphasis will be placed on physical phenomena that can be used in a new generation of fast and reliable metrological instrumentation for nanoscale structure characterization. Submissions are sought in the following areas:

- novel fabrication methods of nanoscale silicon structures
- optical characterization of nanoscale silicon
- mesoscopic carrier transport in nanoscale silicon structures
- nanoscale silicon device prototypes utilizing quantum phenomena
- ultra-high density memory and fast logic devices based on nanoscale silicon

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Wide Bandgap Semiconductors (DCMP/DMP) — 2.9.3

Research and development of wide bandgap semiconductors continues to attract much interest for emerging technologies including blue-green to UV light emitters, solar-blind photodetectors, and high power/high frequency electronic devices. Experimental and theoretical papers are solicited to address issues related to materials growth, electronic and optical properties, and device development in GaN and related alloys, II-VI Zn-based semiconductors, SiC of all polytypes, diamond, etc. Abstracts are encouraged for work in bulk materials and systems of low dimensionality, such as quantum well heterostructures and quantum dots. Topics to be covered include materials growth (epitaxy and bulk techniques), electronic and optical properties, roles of point and extended defects, band structure and defect theories, and device characterization.

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Spin-dependent Phenomena in Semiconductors and their NanoStructures (DMP) — 2.9.4

Recent developments in the physics of spin-dependent phenomena in semiconductors have opened exciting new possibilities in semiconductor-based spin electronics and quantum computation. A number of seminal discoveries have occurred in this context over the past three years, including the fabrication of ferromagnetic semiconductors such as (Ga,Mn)As with Tc as high as ~110 K, the demonstration of electrical spin injection using spin-LED structures and the observation of long coherence times associated with optically excited spin states in n-doped semiconductors. This focused session solicits abstracts that explore a fundamental understanding of spin processes in magnetic and non-magnetic semiconductors (hetero- and nano-structures, as well as bulk crystals). Topics of particular interest include: crystal growth and nanofabrication of magnetic semiconductor and hybrid magnetic/semiconductor materials; spin injection and propagation in semiconductors, co-operative phenomena (ferromagnetism, antiferromagnetism, spin polarons) in magnetic semiconductors, electronic spin dynamics/spin coherence, spin-dependent tunneling, magneto-optical and optoelectronic effects, electronic band structure of magnetic semiconductors, and spin-based quantum computing in semiconductors. Papers reporting progress in incorporating these concepts into geometries suitable for semiconductor-based spin devices are welcomed.

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Fundamentals of Semiconductor/Thin Dielectric Structures (DMP/FIAP) — 3.9.1

Nanoscale device technology is stimulating intense study of very thin dielectric layers on semiconductors. The aggressive scaling of CMOS technology calls for identifying high _ dielectrics in replacing SiO2 gate oxide, of which the thickness is now approaching the quantum tunneling limit. A number of binary oxides and silicates in amorphous form have emerged, and shown impressive dielectric properties with an effective SiO2 layer thickness as thin as 1.0nm. Advances in oxide epitaxy has led to single crystal oxides grown on Si surface showing abrupt interface and transistor performance. For III-V compound semiconductors, progresses have also been made in wet oxidation and surface passivation that led to the MOSFET devices and high performance optoelectronic devices. This focus session will provide a forum for researchers to report the latest developments and to address the critical issues in this rapidly growing field. Emphasis will be given to the understanding of the fundamental physics of these new semiconductor/dielectric structures. In this session, we encourage both experimental and theoretical contributions on the following topics: the growth and synthesis of new dielectric materials for Si and III-V semiconductors, physical characterization, structural and interface stability, defect dominated charge transport, tunneling and dielectric breakdown, processing compatibilities, the impact on device physics and performance, etc.

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Prof. Kent D. Choquette, Department of Electrical and Computer Engineering; Microelectronic Laboratory, University of Illinois at Urbana-Champaign; 208 N. Wright Street, Urbana, IL 61801

Polarization in Ferroelectric Thin Films (DMP) — 3.9.2

Ferroelectric and dielectric perovskites present a rich variety of electrically tunable materials impacting the next-generation of solid state memories, microwave elements, piezoelectric sensors and actuators, uncooled infrared sensors, etc. Although there is currently considerable activity on the implementation of these materials in thin film form, fundamental understanding of the interplay among processing, microstructure and physical properties, especially the time-dependent behavior, is still lacking. Therefore, understanding polarization dynamics in carefully selected thin film dielectrics, ferroelectrics and relaxors has been identified as a unified and critical theme for this Focused Topic. In dielectrics such as barium strontium titanate (BST), polarization dynamics involves dynamic fluctuations of dipolar clusters over picosecond time scales; understanding dielectric responses, loss mechanisms and dipolar dynamics in these materials will influence microwave devices and next-generation memories. Polarization dynamics in relaxor ferroelectrics involves the complex interplay between the formation of nanopolar clusters, their chemistry and dipolar / structural fluctuations within them. In ferroelectrics, the dynamics during switching under applied field and during relaxation of the remanent polarization, are key problems in nonvolatile memories, field effect devices and infrared sensors. In thin films, these time-dependent effects are convoluted by size effects, surface / interface phenomena, defects and electromechanical constraints. Polarization dynamics in these three types of perovskites spans almost 20 decades in time, and are the unifying theme of this focus topic.

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Multiscale dynamics, relaxation and charge transport in polymers (DCMP/DMP) — 4.9.7

These sessions will focus on the interplay between dynamics, relaxation, and ionic charge transport in polymers. The intent is to identify common elements and concepts over a broad range of polymeric materials, including polymer films melts and blends, block coplymers, polymer electrolytes, polymer-ceramic nanocomposites, ionically conducting polymers, biopolymers and proton-conducting membranes. Due to the unusually broad spectra of relevant time and length scales exhibited by the excitations and relaxational processes in these materials, a wide range of experimental and theoretical techniques are now being applied to the solution of dynamical problems. Contributions of recent results from experiments (including NMR, neutron scattering, dielectric relaxation and rheological measurements), theory (mode coupling, scaling laws, critical phenomena, etc.) and computer simulations are solicited.

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Organic Electronic Materials and Devices (DMP) — 4.9.8

This focused session will be devoted to conjugated polymers and other organic materials for electronic and photophysical applications. Both the fundamental science and applications of these materials will be addressed. Topics to be covered include, but are not limited to: characterization of the fundamental excitations; transport and other electrical properties; new materials; applications such as light-emitting diodes, photodetectors, solar cells, lasers, and thin-film transistors; and materials issues such as contacts, defects and mechanisms of aging and failure.

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High-Tc Superconducting Materials: Intrinsic Properties and Extrinsic Modifications (DCMP/DMP) — 5.9.1

The objective in this Focus Topic is to illuminate and explore recent developments in the understanding of High-Tc and related superconducting materials. Specific and timely issues include (a) systematics of the characteristic length and magnetic field scales, (b) anisotropy in their conductive and electrodynamic properties, and (c) current transport phenomena. We seek contributions on investigations of vortex (mixed) state features, particularly properties and structure of the flux lattice and pinning of vortices via enhanced pinning networks created artificially by irradiation, chemical, patterning, or other means. The transport of high density currents across grain boundaries and other interfaces has fundamental importance for many bulk applications of superconductivity, and we encourage abstracts providing a better understanding of these phenomena. Experimental and theoretical work that elucidates the interrelationship of microscopic fundamental physical properties on materials' macroscopic characteristics are strongly encouraged.

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Magnetic Nanostructures and Heterostructures (DMP/ GMAG) — 6.9.1

This focused topic will concentrate on the properties of artificial magnetic structures characterized by reduced dimensions at the nanometer length scale. This includes experimental and theoretical advances in magnetic phenomena occurring in films, superlattices, multilayers, nanocomposites, heterostructures, wedges, quantum dots, and arrays of lower dimensional structures. Phenomena covered in this session include low-dimensional magnetism, interlayer magnetic coupling, exchange bias, spin-dependent transport (especially giant magnetoresistance, tunneling magnetoresistance and spin injection), magnetic quantum confinement, magnetic semiconductors, effects of structural disorder on magnetism, spring magnets, and magnetic anisotropy in nanoscale structures. Of special interest is the fabrication of nanostructures with atomic-scale control, characterization methods with site and element specificity, novel deposition techniques for the creation of nanoscale magnetic features, and unusual physical phenomena present in these types of systems.

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Magnetoresistive Oxides (DMP/GMAG) — 6.9.2

The Colossal Magnetoresistance (CMR) found in the manganese oxides widely known as manganites is just one of the many exotic phenomena that highlight the dominant role of electron-electron and electron-lattice interactions. In this class of materials there is an interplay between the lattice, spin, charge and orbital degrees of freedom that gives rise to a variety of ground states that include magnetic, charge, and orbital ordering, and metallic/ insulating charge transport. The charge ordering may exhibit stripe modulation and in most of the phase diagrams tendencies toward electronic and/or structural phase separation are observed. Some of these themes are common to other transition metal oxides, such as the ruthenates. This focus topic will address the fundamental aspects of these types of ordering in the manganites and related phenomena in Mn pyrochlores, ruthenates, cobaltates and spinels, as well as the role that mixed-phase tendencies play in these compounds. Contributions will be encouraged dealing with the fundamental issues of these types of ordering and the common issues among the transition metal oxides. These will include experimental or theoretical contributions that clarify the roles of the spin dynamics, charge and orbital ordering, stripe formation and phase segregation, lattice and magnetic polarons, field-induced transitions and the effects of dimensionality. This focus topic will bring together the broad effort in understanding the fundamental physics of the CMR manganites and related transition metal oxides, as well as the prospects for potential technological applications.

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Nanotubes, Fullerenes and Related Materials (DMP) — 7.9.1

This focus topic will provide a platform for discussing new developments in the field of nanotubes, fullerenes, and related carbon based materials. Particular emphasis will be on the structural, mechanical, optical, and electronic properties and their potential technological applications. Experimental and theoretical contributions are solicited in (but not limited to) the following areas:

- Materials synthesis, processing and characterization
- Theory and simulation of growth mechanisms and physical properties
- Physical and chemical properties of individual nanotubes and nanotube solids
- Optical properties of nanotubes
- Synthesis, characterization, and physical properties of intercalated nanotubes
- Structure and properties of new fullerene compounds including endohedral fullerenes and intercalated fullerides
- Potential technological applications such as electron field emission, nano-devices, micro-probes, nanocomposites, and energy storage.

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Biological/Biomimetic Materials (DMP) - 10.9.1

This topic focuses on the characterization, properties and applications of biological and biomimetic materials. This includes the study of the structure and dynamics of these materials, as well as their biophysical and mechanical properties. Talks describing biomedical, biotechnical and industrial applications are also welcome. The session covers a wide variety of biological and biomimetic materials including, but not limited to: natural and synthetic cells, biomembranes and biopolymers; biosensors; DNA (chips, transport); phospholipids and other self-assembled systems; neural networks; interfaces between biological and non-biological materials.

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Dynamics of Fracture and Fatigue: Theory, Experiment and Simulation (DMP) — 12.9.5

Fracture dynamics is recognized as one of the most important problems of modern material science. Physics of crack propagation includes many interacting degrees of freedom, intrinsic disorder, and multiple length and energy scales. Fractures are ubiquitous in our daily lives and one of the most prominent causes of economic loss in modern society. Despite the scale of the problem, what makes some cracks remain small while others rip through a material at high speed is still a challenge. The goal of these sessions is to highlight recent progress in theory, experiment and large scale molecular dynamic simulations. Our goal is to foster interaction between theorists, experimentalists and simulators to stimulate progress in the understanding of the physics of fracture. The sessions will include, but will not be limited to, the following topics:

-Dynamic instability of fast cracks.
-Fatigue and nucleation of micro-cracks.
-Brittle to ductile transition.
-Plastic deformations and cracks.

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Multiscale Phenomena in Multiferroic Materials (DMP) — 12.9.6

Multiferroic materials have strong coupling between two or more of the magnetic, electric, and structural order parameters, resulting in simultaneous ferromagnetism and/or ferroelectricity and/or ferroelasticity. Examples include magnetic ferroelectrics, complex elastic materials such as martensites and magnetoelastics, and composites of the above. The origin of multiferroic behavior and the nature of the coupling between the magnetic, electric polarization, and structural order parameters are not well understood. However, elasticity, alone or coupled with other functionalities, plays a crucial role in determining the salient properties in all ferroelectrics. This focused session aims at fostering dialogue among experimentalists and theorists, bringing scientists together from academia and industry, identifying key questions in this emerging field, and seeking broader understanding and a common language. The complexity and collective multiscale phenomena inherent to multiferroic materials require such a multidisciplinary approach, merging synthesis and characterization techniques from materials science and chemistry with theoretical methods from statistical physics and nonlinear condensed matter.

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Nanoparticles and Nanowires: From Individual Nanostructures to Large-Scale Assemblies (DMP) — 13.9.2

The study of nanometer sized structures is revealing a broad range of fascinating electronic, optical, magnetic and electrostatic properties. Physical and chemical preparation of nanoparticles (3D confined) and nanowires (2D confined structures) permit precise control of particle size, shape and are providing clearer insights into the size evolution of materials properties. Closely coupled experimental and theoretical studies of individual metallic, magnetic and semiconducting nanoparticles, nanoparticle dispersions, and dense nanoparticle assemblies are permitting the more subtle interparticle interactions to be understood and exploited. Harnessing these new collective interactions may permit the development of new self-assembling materials and devices well below current lithographic dimensions. This symposium with attempt highlight advances in the preparation and characterization of nanoparticles and nanowires and their use as the building blocks for new nanostructured materials. Multi-component core-shell particle structures and nanowires chemical modulation provide good examples of building new functions into the individual nanostructures. The assembly of nanoparticles and nanowires into both single and multicomponent arrays provides the opportunity to introduce controlled levels of complexity and engineer collective interactions. Investigations of these nanostructures benefits from and contributes to the development of advanced electron and scanned probe microscopy methods and the establishment of techniques to probe the optical electrical and magic properties of individual nanostructures.

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Dynamics in Ice (DMP) — 14.9.1

Ice plays a major role in a large number of environmental phenomena ranging from the destruction of the ozone layer in the atmosphere to the flow of glaciers to thunderstorm electrification. Consequently, ice is an ideal transparent test material to probe basic materials physics questions that have immediate geophysical implications. This session will focus on dynamical processes occurring at ice surfaces and interfaces (such as grain boundaries) as well as in the bulk. These processes are important insofar as they influence surface structure, crystal growth, nucleation, plastic flow etc., all of which can have a profound influence on the natural phenomena of interest. We are soliciting papers on homogeneous and heterogeneous nucleation, kinetic roughening, growth kinetics and stability, liquid flow at interfacially melted boundaries, plastic flow in the bulk, dislocation motion, and impurity diffusion. The emphasis is on novel experimental methods and recent computational and theoretical advances.

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Laser Processing of Novel Nanoscale Materials (DMP) — 14.9.2

From research and development to industrial and medical applications, lasers have firmly established themselves as efficient tools for materials processing, exploration, characterization, and manipulation. The purpose of this focused session is to address new research on materials processing for the specific case of nanometer-scale materials processing and structuring which are based primarily on laser-assisted deposition, modification, and material removal. We invite experimental and theoretical contributions on laser-based synthesis, characterization, modification and manipulation of nanometer-scale materials and features derived from all classes of materials. Specific topical areas include, but are not limited to:

- Nanometer-scale surface modification, patterning and structuring resulting from self-organized structures, direct-write, laser chemical etching and irradiation, near-field materials processing, and lithography
- Nanometer-scale particles, rods, tubes, wires, dispersions and assemblies thereof synthesized by laser-assisted deposition including combinatorial and matrix assisted processes
- Novel laser-based diagnostics for nanometer-scale material formation and monitoring including novel schemes for etch endpoint determination during nanometer-scale laser etching of materials
- Novel combinations of laser processing with other tools such as energetic atomic, ion, and molecular beams
- Modeling and experimental studies of nanometer-scale structure formation during the initial phases of pulsed laser deposition and target irradiation in a variety of material systems
- Nanometer-scale modeling and experimental studies of laser-induced plasmas

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Low Energy Ion Beam Modification of Microstructure and Morphology (DMP) — 14.9.3

Ion beams add another degree of freedom to the processes of thin film growth and surface modification. By providing energy to create defects, remove atoms, enhance surface transport and alter chemical kinetics, non-equilibrium structures can be created with unique surface morphologies and microstructure. These sessions will focus on the fundamental physical mechanisms by which this is accomplished. Using both analytical models and experimental studies, a primary goal of the symposium will be to develop a deeper understanding of the physical processes controlling ion-enhanced growth and surface modification. Phenomena that will be included are self-organization and pattern formation, texture modification, enhanced surface kinetics, viscous transport and surface defect creation. Novel applications of ion beams to the creation of nanoscale structures will also be included.

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Nanometer-Scale Morphologies of Surfaces, Interfaces and Thin Films (DMP) — 14.9.4

The evolution of nanometer-scale surface and interface morphologies is fundamental to a detailed understanding of crystal growth, epitaxial and polycrystalline thin film deposition, etching reactions, and materials processing of metals, semiconductors, and ceramics. Recent advances in scanning probe microscopy, electron microscopy, x-ray diffraction and spectroscopy, and theoretical and computational modeling are producing a wealth of new quantitative knowledge on the thermodynamic driving forces and kinetic factors that control surface and interface morphology. We welcome contributions that report innovative experimental and theoretical investigations of the basic nanometer-scale phenomena and the applications of these concepts in novel synthesis and processing methods. Some representative topics are instabilities in morphology driven by deposition flux, ion bombardment, strain, alloy composition, or surface chemistry; the growth of strained epitaxial 3D islands (e.g., InAs “quantum dots”); dewetting of thin solid films; and faceting and step bunching on crystal surfaces.

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Surfaces, Interfaces, and the Growth of Thin Films (DMP) — 14.9.5

This session will feature new experimental methods, results and models related to surface and interface structures. It will also explore the growth and properties of thin films in relation to atomic, molecular and larger scale processes that take place at surfaces and interfaces. As smaller devices are made, and greater selectivity is demanded of surface chemical reaction techniques, there is increased interest in the role of surface defects, and of patterned substrates for creating such structures. Moreover, as the relevant size range decreases, we are seeing a convergence of physical, chemical and biological methods and interests. Contributions are solicited on the following topics: 1) Surface, interface and small particle structure and thermodynamics; 2) Microscopic mechanisms of nucleation, growth, sublimation and dissolution; 3) Electronic, magnetic, optical, and transport properties of thin films in relation to structure; 4) Reaction processes at surfaces involving interdisciplinary (e.g. biophysical or biochemical) approaches.

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Materials Theory and Computation for Industrial Problems (DMP/FIAP) — 16.9.1

With ever-more-powerful computational resources, algorithms, and methods, and the concomitant abilities to tackle more and more complex materials problems, computational materials research is finding its way into industrial and applied settings more than ever. This focus session will provide an overview of the impact of materials theory and computation applied to problems of a technological nature. Papers are solicited on a wide variety of phenomena, including (but not limited to) the following areas:

- Chemical (e.g., catalysis, batteries, fuel cells)
- Transport (e.g., molecular electronics, ionic transport, bulk and surface diffusion)
- Structural (e.g., alloys, microstructure, mechanical properties, durability)
- Electronic (e.g., band-gap engineering, optical properties, nanostructures)
- Magnetic (e.g., magnetoresistance, magnetic recording)

Authors are encouraged to stress the impact of their work on technological and industrial problems. Materials of interest include metals, semiconductors, and ceramics, either in bulk or at surfaces or interfaces. Any computational methodologies are welcome, although we anticipate contributions from both atomistics (e.g., first-principles, semi-empirical potentials, Monte Carlo, molecular dynamics, etc.) and larger length scale modeling (e.g., continuum treatments, finite element methods, etc.).

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Multiscale Modeling of Materials: From Atoms to Devices (DMP) — 17.9.1

Many materials phenomena span a large range of length and time scales. The theory of these phenomena may thus involve quantum-mechanical as well as continuum descriptions. This often requires the use of vastly different computational methods according to the specific scales considered. The modeling may employ quantum-mechanical methods, atomistic simulations at the level of classical molecular dynamics and/or Monte Carlo methods, and continuum solutions of partial differential equations on large scales. Integrated approaches that tightly couple all of the seemingly disparate scales remain one of the grand challenges of materials simulations even though each of the computational methods — taken separately — is by now well developed. However, good progress is being made in both the methodology of multiscale modeling and in the application of multiscale modeling to important topics of materials physics by a variety of imaginative techniques. This session aims at bringing together practitioners and developers of multiscale methods in all areas of materials physics, in order to both review the state of the art and to stimulate further progress.

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DMP PARTICIPATES IN CONGRESSIONAL RECEPTION

APS member John Galayda and former DMP Chair Jim Roberto participated in Congressional visits and attended a special reception honoring Representatives Vern Ehlers (R-MI) and Rush Holt (R-NJ) on May 16. The events, which involved more than 50 physicists, were organized by the APS divisions of Nuclear Physics, Particles and Fields, and Physics of Beams.

The purpose of the visits and reception were to raise awareness of the inseparable connection between basic research and the U.S. economy. In the last 50 years, more than half the growth in the gross domestic product is attributed to technology fueled by science.

Particular attention was focussed on the need for a balanced federal R&D portfolio that recognizes the interpendence of the sciences. Former NIH Director Harold Varmus has repeatedly warned that medicine relies heavily on progress in the physical sciences and engineering. Support for the physical sciences is needed both to fuel the economy and to contribute to the technology and knowledge base for advances in the life sciences.

Visits to more than 60 Congressional offices revealed strong support for science. Unfortunately, appropriators will have extraordinary difficulty writing their bills due to discretionary spending limits that, in many cases, fall below current spending levels. This places science in direct competition with popular programs such as water projects, housing, and veterans affairs.

Thanks to the hard work of physicist Congressmen Ehlers and Holt and many others, a $1 billion boost for science appears in the FY 2001 House Budget Resolution. This increase will be extremely difficult to achieve without heroic action by the Congress. Passage of the Federal Research Investment Act (H.R. 3161 or the "Doubling Bill") is an important first step toward increasing federal investments in science and achieving a balanced portfolio.

DMP members can help by advocating broad support for science in letters and meetings with their Congressional delegations. Issues of particular interest to DMP include the Doubling Bill and FY 2001 initiatives in nanoscience (National Nanotechnology Initiative), facilities support, and high-performance computing. The next three months are critical, as important decisions and tradeoffs are being made for the FY 2001 budget.

Visit the DMP Homepage: www.aps.org/units/dmp

Our homepage on the World Wide Web contains all types of Divisional information, including profiles of our award winners, citations of new Fellows sponsored by DMP, and current and back issues of the DMP Newsletter with the program of Focussed Sessions for the March Meeting.