

IBEW Ratifies New Contract

The International Brotherhood of Electrical Workers (IBEW), Local 2230, has reached agreement on a new contract with Brookhaven Science Associates, which manages Brookhaven National Laboratory for DOE. IBEW members voted to ratify the new three-year contract on Friday, July 30. The contract covers the period from August 1, 2010, to July 31, 2013.

The vote on the new contract followed 23 days of negotiations between May 20 and July 30, with several labor management sub-teams also meeting during the same period. A federal mediator came in during the last three days of negotiations to assist the parties in reaching agreement. The final agreement was captured in a 14-page Memorandum of Agreement, which was signed by the bargaining teams from each side on July 30. Information sessions will be held for managers and supervisors over the next several days. A new comprehensive contract book will be prepared with all of the changes during the next several months.

The Union Bargaining Team, which was led by Local 2230 President and Business Manager Joe Buscemi, included IBEW Representative Dominick Macchia, Phil Pizzo, John Berry, Frank Raynor, Tony Boggi, Dan Galligan, Jim Cassidy and Bill Peterson. The Management Bargaining Team, which was led by BNL Labor Relations Manager Dave Allshouse, included Tony Bowman, Leo Somma, Chris Johnson, Phil Pyle, Rick Backofen, Donna King, Donna Dowling and Ernie Tucker.

IBEW Local 2230 is the Lab's largest union with 369 members. Membership includes custodians, grounds workers, clerks, warehouse employees, photography and graphic arts workers, electricians, carpenters, and plumbers.

Brookhaven Lab Helps Support First African School of Physics Brings cutting-edge physics and technology to sub-Saharan Africa

This August, students and scientists from African countries will get an opportunity to learn about innovative physics experiments, accelerators and technology on their own continent.

The first African School of Physics is holding classes August 1-21 at the National Institute of Theoretical Physics at Stellenbosch in South Africa — the first African country to become a member of an experiment at the Large Hadron Collider (LHC) at the CERN particle physics laboratory in Geneva, Switzerland. Fifty-nine students — including 40 from 17 African countries — will take part in the program, learning about theoretical and experimental physics from leading international scientists.

Most of the students are pursuing or have completed advanced degrees in physics, but lack opportunities to gain specialized knowledge in subatomic physics. The trip and expenses for all African students are paid for by the school, which is supported by 13 international institutions, one of which is BNL. BNL physicist Ketevi Assamagan, who was born in the West African nation of Togo and works on the ATLAS experiment at the LHC, is a lecturer and member of the school's international organizing committee.

"This may be the first opportunity these students have to learn about particle and nuclear physics," said Steve Muanza, a physicist at France's CNRS/IN2P3 and the co-founder and director of the school. "We hope that the material presented at the school piques their interest and they go on to pursue these topics."



BNL physicist Ketevi Assamagan, who was born in the West African nation of Togo and works on the ATLAS experiment at the LHC at CERN, is a lecturer and member of the African School of Physics' international organizing committee.

"We will cover a lot of subject matter not taught at any university in Africa," Simon Connell, a member of the local organizing committee, said. "Students can take the knowledge they learn here back to their home institutions, where they can continue researching and teaching. We don't expect the benefits of the school to stop when they leave."

Students will not be limited to lecture halls. A videoconference with CERN will link students with physicists operating the LHC from CERN's Control Centre for accelerators. Students will also spend one afternoon at iThemba LABS, an accelerator facility in South Africa, practicing lab experiments and learning about how particle physics and its associated...

See *African School* on p.2

BNL's Science & Technology Award Winners for 2010

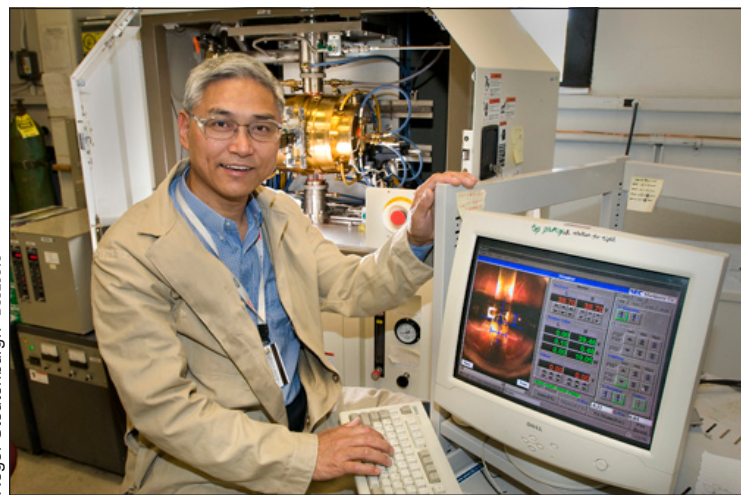
Michael Ernst and Zhangbu Xu of the Physics Department, and Genda Gu of the Condensed Matter Physics and Materials Science Department received BNL's Science and Technology Awards for 2010 at the annual Employee Recognition Award Ceremony held in Berkner Hall on Friday, June 18. The awards, consisting of a plaque and \$10,000 each, are given to recognize distinguished contributions to the Laboratory's mission in each of three broad areas of work, and are the highest accolades given by Brookhaven to its employees. The Science & Technology Award winners are featured below.

Michael Ernst, a computational scientist in the Physics Department, was recognized for his outstanding and innovative leadership of the RCF, the computing facility for the Relativistic Heavy Ion Collider, and the ACF, the computing facility, also located at BNL, for the ATLAS experiment of the Large Hadron Collider (LHC) in Europe. His proactive management has ensured that this major computing effort will meet the world-class needs of RHIC and ATLAS. The RCF runs...

See *Michael Ernst* on p.2



Joseph Rubino D0620610



Genda Gu, a physicist in the Condensed Matter Physics and Materials Science Department, was honored with BNL's Science & Technology Award for his outstanding contributions to the synthesis of high quality single crystals for experimental research, particularly the high-temperature superconducting cuprates.

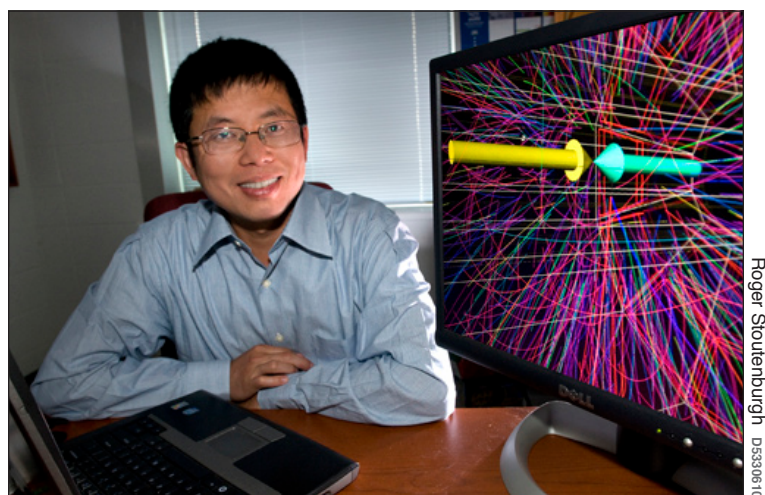
Having grown a number of the largest superconducting cuprate crystals in the world, Gu joined BNL in 2001 to develop a crystal growth program.

See *Genda Gu* on p.2

Zhangbu Xu, a physicist in the Physics Department, won BNL's Science & Technology Award for his extraordinary contributions to particle measurements in heavy ion collisions at the Relativistic Heavy Ion Collider (RHIC) through enhancements to the STAR detector in which he has developed new instrumental techniques and then applied them to significantly broaden the physics reach of STAR and the RHIC program.

Xu played a pivotal role in the development of the scientific...

See *Zhangbu Xu* on p.2

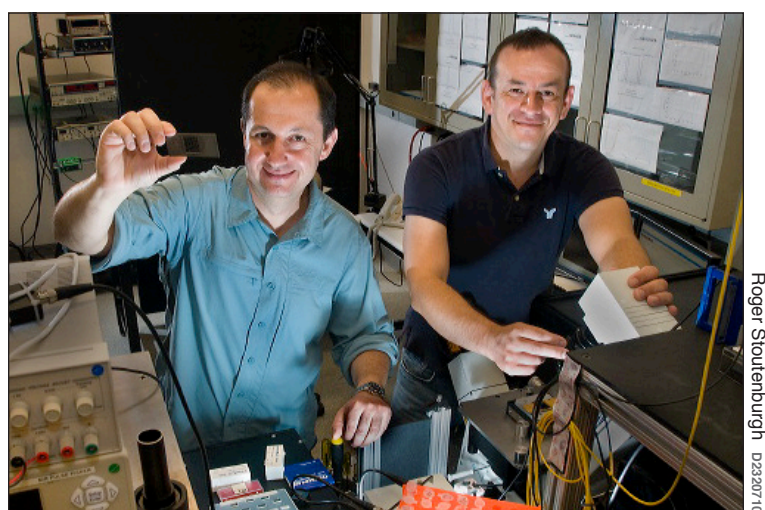


Roger Stoutenburg D530610

Nanoparticles Increase Intensity of Quantum Dots' Glow Demonstration of precision DNA-based nanoassembly method could lead to advances in solar cells, optoelectronics, and biosensors

By linking individual semiconductor quantum dots with gold nanoparticles, scientists at BNL have demonstrated the ability to enhance the intensity of light emitted by individual quantum dots by up to 20 times. The precision method for making the light-emitting particle clusters — published online July 26, 2010 in the journal *ChemComm* — will greatly advance scientists' ability to study and modify the optical properties of quantum dots, and could eventually lead to improved solar energy conversion devices, light-controlled electronics, and biosensors. The research was supported by the DOE Office of Science.

"Quantum dots — tiny crystals of semiconductor materials that fluoresce, or emit light, in



Oleg Gang (left) and Mircea Cotlet at BNL's Center for Functional Nanomaterials

response to photoexcitation — have enormous potential for use in a wide range of fields from solar energy conversion to computing and medicine,"

said Mircea Cotlet, a physical chemist at BNL's Center for Functional Nanomaterials (CFN) and lead author on the...

See *Quantum Dots* on p.2

Roger Stoutenburg D2320710

CALENDAR
OF LABORATORY EVENTS

- The BERA Store in Berkner Hall is open weekdays from 9 a.m. to 3 p.m. For more information on BERA events, contact Andrea Dehler, Ext. 3347, or Christine Carter, Ext. 2873.
- Additional information for Hospitality may be found at www.bnl.gov/hospitality/calendar.asp.
- Most events below are organized through the Quality of Life/BERA/Recreation Office, Bldg. 400, <http://www.bnl.gov/bera/>

— REGULARLY —

Weekdays: Free English for Speakers Of Other Languages Classes

Beginner, Intermed., Adv. classes, various times. All welcome. Learn English, make friends. See <http://www.bnl.gov/esol/schedule.asp> for schedule. Jen Lynch, Ext. 4894

Mondays & Thursdays: Kickboxing
\$5 per class. Noon–1 p.m. in the gym. Pay as you go. Ext. 2873.

Mon., Tues., Thurs., & Fri.: Tai Chi
Noon–1 p.m., B’haven Cntr N. Rm. Adam Rusek, Ext. 5830, rusek@bnl.gov.

Tues.: Hospitality Welcome Coffee
Will resume in September.

Tuesdays: Zumba
Will resume in September.

Tuesdays: Knitting Class
2–4 p.m. Berkner Hall lobby until Sept. All levels of skill. Free. Call Ext. 5090 to confirm.

Tuesdays: Toastmasters
Two monthly meetings: 1st & 3rd Tuesdays, 5:30 p.m., Bldg. 463, Rm 160. Guests and visitors welcome. www.bnl.gov/bera/activities/toastmasters/.

Tue., Wed., & Thurs.: Rec Hall Activities
5:30–9:30 p.m. General activities, TV, ping pong, chess, games, socializing. Christine Carter, Ext. 5090.

Tuesday & Thursday: Aqua Aerobics
5:30–6:30 p.m., Pool. Will resume in September. Ext. 2873.

Wednesdays: On-Site Play Group
10 a.m.–noon. Apartment area playground for summer. Infant/toddler drop-in event. Parents meet while children play. Ext. 2873. See <http://www.meetup.com/BNL-Playgroup/>

Wednesdays: Yoga
Noon–1 p.m., B’haven Center. Free. Ila Campbell, Ext. 2206, ila@bnl.gov.

1st Wednesday of month: LabVIEW
1:30–3 p.m., Bldg. 515, 2nd fl. Seminar Rm. Free technical assistance from LabVIEW consultants. Ext. 5304, or Terry Stratoudakis, (347) 228-7379.

Thursdays: BNL Cycletrons Club
5 p.m., Brookhaven Center. First Thurs. of month. Tim Devine, Ext. 2350.

Thursdays: Reiki Healing Class
Noon–1 p.m., Call for location. Nicole Bernholz, Ext. 2027.

Fridays: Family Swim Night
5–8 p.m. BNL Pool. \$5 per family. Ext. 2873.

Fridays: Family Gym Night
5–8 p.m. Family gym activities. Free. Ext. 2873.

Genda Gu from p.1
He spent two years growing Bi-system superconducting cuprate crystals, each typically having to be monitored every four hours for two months — and succeeded in producing the large crystals, including one that was ten times larger than his previous record. He has now established himself as the leading source of these superconducting crystals in the US. His ability to synthesize these materials allowed BNL to move to the forefront in this extremely important and topical research field.

Gu’s crystals are used in various studies employing experimental techniques such as neutron scattering, angle resolved photoemission, and scanning tunneling spectroscopy, and they have enabled BNL colleagues to make discoveries such as the universal nature of spin dynamics in cuprate superconductors and other important findings. While at BNL, Gu has co-authored approximately 80 papers of which 13 appeared in *Physical Review Letters*, four in *Science*, five in *Nature* and four in *Nature Physics*. A dozen of his publications have been cited more than 100 times each. — Liz Seubert

Quantum Dots from p.1
...current study, which included BNL’s Oleg Gang and Mathew Maye, now at Syracuse University. “But many factors can influence the light they emit, and it’s hard to sort out the contributions of these factors in large samples due to the inherent ensemble averaging. Building single-molecule structures at the CFN seemed the ideal way to tease out these effects.”

The BNL team recently developed a precision technique for building such nanosized structures using short strands of DNA as a highly specific “glue” to link particles together.

“DNA consists of two strands with complementary pairings of bases that stick together in only one way,” explained Gang, leader of the team that developed the technique. “By varying the length of the individual strands and attaching complementary pieces to the particles we want to join, and anchoring the whole process on an assembly surface, we can precisely control the construction of individual nanoclusters.”

In the current study, the team used this multi-step process to attach semiconductive quantum dots to gold nanoparticles. Metallic materials are known to affect the optical properties of quantum dots, either by enhancing or inhibiting photoluminescence, depending on a range of factors including the size and shape of the materials, the distance between them, and the wavelength of light used to induce photoexcitation.

The precision assembly technique allowed the scientists to control the size, shape, and distance factors to a high degree of precision and test the effect of wavelength in isolation. They specifically chose two wavelengths to test: one close to the so-called “plasmon resonance” of the gold nanoparticles — that is, a wavelength that induces a collective oscillation of the material’s conductive electrons, leading to strong absorption of light at that wavelength — and one outside this range.

The wavelength within the plasmon resonance range enhanced photoluminescence approximately fourfold when compared with the luminescence achieved by the wavelength outside the plasmon resonance range. When compared with the photoluminescence of individual quantum dots not linked to gold nanoparticles, the resonant wavelength enhanced photoluminescence of the gold-linked quantum dots by an order of magnitude.

“This ability to control the excitonic properties in plasmonic fluorescent quantum dots is essential to the development of devices such as solar cells, light emitting diodes, or optical circuits and might improve the sensitivity of quantum-dot based biosensing assays,” Cotlet said.

— Karen McNulty Walsh

In Memoriam

William Ross, who joined the Central Shops Division as a machinist on January 22, 1962, and retired as an experimental machinist on April 27, 1984, died on April 20, 2010. He was 91.

Richard McKenzie, who joined the Security Division as a patrolman trainee on November 19, 1949, becoming a patrolman in 1950, and retiring as a guard on June 30, 1986, died at age 88 on June 10, 2010.



Roger Stoulenburgh 02330710

Simons Fellows Take a Peek at BNL

The Simons Fellowship recipients visited the Relativistic Heavy Ion Collider’s PHENIX detector during their tour of Brookhaven July 12. Thanks to a grant from the Simons Foundation, this group of 32 high school students from Long Island and across the country is spending the summer at Stony Brook University, participating in STEM (Science, Technology, Engineering, and Math) research. The Simons fellows

also had the opportunity to explore some of the research that happens at BNL. Under the supervision of Scott Bronson, an administrator in the Office of Educational Programs, the students got to see the PHENIX detector and the New York Blue supercomputer. They also learned about research from some of the scientists at Brookhaven: Achim Franz, Gabor David, and Edouard Kistenev talked about their

work at PHENIX; Howard Gordon explained Brookhaven’s contribution to the ATLAS experiment at the Large Hadron Collider at CERN, the European particle physics laboratory in Switzerland, and Yuefan Deng discussed supercomputers like New York Blue. The students’ first-hand look at BNL’s scientific explorations inspired some dropped jaws — and, hopefully, a lifelong interest in STEM.

— Sophie Bushwick

Small Business ‘Green’ Showcase, 8/18

On Wednesday, August 18, stop by in Berkner Hall lobby to see a unique bicycle cover of recycled material, and find out about a “solar traveler.” These two unusual items are part of the Small Business “Green” Showcase that the Lab is sponsoring from 9 a.m. to 3:30 p.m., which will feature 18 small businesses and small business organizations, all interested in helping the environment stay “green.” All are welcome — who knows what inspiration you’ll find?

Michael Ernst from p.1

...with nearly 100 percent up time as required for critically important data taking and analysis for the experiments at RHIC, PHENIX, and STAR, and the ACF is the largest and best performing of the 10 Tier 1 computing centers for ATLAS. The performance of the RCF/ACF has led to the international and national recognition of BNL’s capability in data-intensive computing.

Ernst joined BNL in 2007 and leads the planning for the technical evolution of computing and data-storage equipment, networking, grid deployment, and integration with other facilities in the U.S. and the rest of the world. He has implemented a program that integrates five smaller Tier-2 and 44 Tier-3 analysis centers at universities and national laboratories in the U.S. to ensure that U.S. scientists can actively participate in the discovery physics expected to come out of the LHC.

He has received accolades from DOE, the National Science Foundation, and colleagues around the world. — Liz Seubert

African School from p.1

...technologies can apply to other fields, including medicine.

One school participant, Petrus Bompere, is a nuclear inspector at the National Committee for the Protection against Ionizing Radiations in the Democratic Republic of Congo. He received his license and graduate degree in physics from the University of Kinshasa in the Democratic Republic of Congo, and hopes to apply his new knowledge to his job in national security.

Another participant, Eno Ituen, a senior lecturer and former physics department head at the University of Uyo in Akwa Ibom, a state in Nigeria, anticipates connecting with experts in the field.

Organizers hope this will be the start of a tradition, and plan to host the school every two years.

Note: This story was taken from a press release distributed by the InterAction Collaboration, whose members represent the world’s particle physics laboratories in Europe, North America and Asia, including BNL. For more information, go to http://www.bnl.gov/bnlweb/pubaf/pr/PR_display.asp?prID=1163.

Grads: Apply to Participate In SBU Provost’s Graduate Student Lecture Series

The Graduate School at Stony Brook University is accepting applications for participation in the Provost’s Graduate Student Lecture Series. This series seeks to provide a mechanism for graduate students across campus and at associated institutions such as BNL to present their work in a public forum; to formally recognize excellence in graduate student research; and to expand communication among disciplines across campus and associated institutions. Each lecture is expected to last about 40 minutes with 20 minutes reserved for Q&A.

Graduate students are encouraged to nominate their paper for inclusion in the series, or faculty may nominate students. The deadline for this series is August 20 for presentations happening in the fall. The application form and information on requirements are available on the homepage of BNL’s Association for Students & Postdocs (ASAP) website at <http://www.bnl.gov/asap>.

Zhangbu Xu from p.1

...program for a novel, high-precision time of flight barrel for STAR and was the first to realize the possibilities of using it in combination with the time projection chamber to make new discoveries at RHIC. He and his colleague used this new instrumentation, along with analysis techniques that he pioneered, to enhance the capabilities of STAR far beyond the original design, opening a wealth of new avenues to study the “perfect liquid” created at RHIC. In 2005, Xu received a Presidential Early Career award “for pioneering scientific research and technical developments in the study of resonances, open charm and particle identified Cronin effect in relativistic heavy ion collisions.”

Recently, Xu led the STAR analysis that produced the first experimental measurement of an anti-hypernucleus — the antimatter analogue of a heavy, strange, hydrogen nucleus. This imaginative exploitation of the near-symmetry between produced particles and anti-particles in RHIC collisions opens the door for studies of nuclear forces in ways not previously imagined, broadly expanding the scientific scope and worldwide interest for the RHIC facility.

— Liz Seubert

TIAA-CREF One-on-One Retirement Counseling

A TIAA-CREF consultant will visit BNL on Tuesday, August 10th, Wednesday, August 18th, Wednesday August 25th and Tuesday, August 31st to answer employees’ questions about their financial matters. The consultant will help you: understand the importance of protecting your assets against inflation, find the right allocation mix, learn about TIAA-CREF retirement income flexibility, and compare lifetime income vs. cash withdrawal options. For an appointment, please call 1-800-732-8353 or go online at <http://www.tiaa-cref.org/bnl> and select “set up a meeting”.



Lab Director Sam Aronson (front, left) with many BNL supervisors who recently completed the voluntary 11-course supervisor certificate program.

BNL Certificate in Supervision Awards Ceremony

This year, 29 more BNL supervisors completed the supervisor certificate program and were honored at a ceremony held on July 29. Lab Director Sam Aronson congratulated the participants and offered his appreciation for their completion of this voluntary program in which each of them chose to participate — even knowing that the time commitment was significant.

The supervisor certificate program was implemented so that new and experienced supervisors could improve their communication, delegation, and performance management skills. The program requires completion of 11 courses within three years to earn the certificate. Credit is given for courses previously completed within the last 10 years.

The July 29 certificate award-

ees were: Brian Boyle, Donna Buckley, Kevin Campbell, Gregory Conde, Richard Conte, Salvatore DiStefano, Michael Dubois, Robert Eger, James Fung, George Goode, Joanna Hall, Timothy Kelly, Robert Kiss, Alan Levine, Wai-Lin Litzke, Michael Loftus, Ali Lopez, Jerome Malley, Robert McKay, Laura Miller, Barbara Moebes, Michael Pena, Moira Raynor, Richard Scheidet,

Janet Soper, Tammy Stein, Joseph Terranova, Gary Welch, and Corene Wood.

For more information about this program and to find other resources for supervisors, visit the Supervisory and Management Development site at <http://intranet.bnl.gov/hr/staffdev/Supervisory-Site.asp> or contact Starr Munson, Ext. 7631, munson@bnl.gov.

Sue Runkowski A True Multimedia Artist

Sue Runkowski, a web designer in the Community, Education, Government & Public Affairs Directorate, can't even remember the first time she picked up a camera. But it's no surprise that she turned to photography at a very young age: both parents are involved in the visual arts.

"I grew up in an environment that was very artistic," Runkowski said. "I've been taking pictures since I was a child."

Today, that early start has paid off. Runkowski's photographs have been published in magazines and exhibited at galleries, including the Islip Art Museum. Although she prefers taking portraits, Runkowski's work includes still life, landscapes, and cityscapes.

Not content with experimenting on a broad variety of photographic subjects, Runkowski also uses multiple mediums. In addition to photography, she practices painting and printmaking, which involves etching an image onto a plate, inking it, and sending it through a printing press.

"My choice of mediums does not define me," reads the statement on her website. "I consider myself an artist, not a photographer, painter, or printmaker."

Runkowski is heavily influenced by pop art, which comes to the fore in her painting. For example, Runkowski's website displays work like "Heart,"



which features an anatomically precise image of the organ, stamped with a bar code and labeled "Heart: All Varieties & Sizes. \$9.99/lb." Other pieces, "A Wrinkle in Time" and "1:30-1:13 PM," portray stretched and elongated clocks.

Runkowski's prints, on the other hand, range from studies of the aforementioned heart to portraits and architectural studies. The latter — including sepia-toned images of a railing, a garden, and a statue — are far less colorful than her paintings.

These architectural studies were created with a technique known as "photo polymer gravure," and combine photography with printmaking. The photo's digital negative is etched into a plate, creating the basis for the print.

"What's great about photo polymer gravure is it's green," said Runkowski. Unlike developing a photo, which requires

chemicals, etching the negative onto a plate uses all-natural ingredients. As Runkowski said, "You expose it with sunlight and develop it with water." For this reason, the resulting images are sometimes called "solar prints."

The variety of media and images that Runkowski explores in her spare time also comes in handy at work. Her artistic background helps Runkowski design websites at Brookhaven.

But more important than gaining her a spot in galleries or helping with her work, Runkowski's art gives her a fulfilling hobby.

"I used to spend almost all of my spare time in some kind of art," Runkowski said.

Although she is currently undergoing what she calls a "creative lull," Runkowski hopes that settling in at Brookhaven will give her the opportunity to spend more time on her artistic endeavors. — Sophie Bushwick

Arrivals & Departures

— Arrivals —

Gabriele Bassi NSLS-II
Daniel Blakely Env. Prot.
Ross Burns PPM
Daniel McCavanagh Maint/Fab
Edward Marczak NSLS-II
Dhiraj Naik Env. Scis.
Kenneth Sawicki C-AD

— Departures —

Danda Acharya CFN
Astrid Imig Physics
Sumit Kewalramani CMP/MS
Elizabeth Mulligan Medical
Heejae Shim Dir's. Office
Karen Torres Medical

Service Anniversaries

The following employees celebrated service anniversaries during May 2010:

— 35 Years —

MaryAnne McGrath HR/OM

— 30 Years —

Hugh Rhodus Maint/Fab
Jean Bunselmeyer Staff Servs.

— 25 Years —

Roger Katz C-AD
Vicki Feldman Lab Protect.
Yong-Nian Tang NSLS
Dana Beavis Physics
Linda Feierabend Physics

— 20 Years —

Richard Meier Magnet
Patrice Windley Bus. Systs.
Carmen Narvaez Facil. Ops.
Dawn Schick Fiscal
Charles Dimino IAO
Paul O'Connor Instrum.
Joseph Perry Lab Protect.
William Struble NSLS-II
Bruce Thyberg Maint/Fab
Raymond Van Houten Maint/Fab
Kenneth Kentoffio Modern Proj.
Robert Soja Physics
Michael Zarcone Physics
William Robinson Site Servs.
Louvania Minter Staff Servs.

— 10 Years —

Anatoli Zelenski C-AD
Steven Giovine Bus. Systems
Kelly B. Guiffreda N&PP Dir.
John Selva Dep. Dir. Ops.
Karen Liebermann Env. Rest.
Balwan Hooda Env. Prot.
Paul Vaska Medical
Michael Thorn HR/OM
Rachel Nieves Physics
Penka Novakova Physics

CALENDAR

Today, Friday, 8/6

*Rat Race Choir Rock Concert

8 p.m. Berkner Hall. All are invited to enjoy this progressive rock band's performance, sponsored by the BNL Music Club. Tickets are \$20 each, buy them at the BERA Store in Berkner Hall or through <http://www.ticketweb.com/>. See notice, p. 4.

Sunday, 8/8

*Summer Sunday, 'Atom Smasher'

10 a.m.-3 p.m. This is the last Summer Sunday of 2010, when the Lab will be open to the public for a free visit, enter until 3 p.m. This Sunday will feature BNL's "Atom Smasher Extraordinaire," the Relativistic Heavy Ion Collider. See notice, p. 4.

— WEEK OF 8/9 —

Thursday, 8/12

Summer Students' Poster Symposium, Closing Ceremony

Noon. Berkner Hall. At the end of the 2010 summer internship program, BNL's Office of Educational Programs invites all to view the display of research posters students will be showing in the lobby and attend the closing ceremony that will follow in the auditorium.

— WEEK OF 8/16 —

Wednesday, 8/18

*Small Business 'Green' Show

9 a.m.-3:30 p.m. Berkner Hall lobby. Small businesses and their organizations will present information on their services. All are welcome. See p.2.

Brookhaven Lecture

4 p.m. Berkner Hall. Ralph James, Nonproliferation & National Security Department, will give a Brookhaven Lecture on "Wide Band-Gap Semiconductor Radiation Detectors: Science Fiction, Horror Story, or Headlines." All are welcome to this free public lecture. Visitors of 16 and older must carry a photo ID.

— WEEK OF 8/23 —

Monday, 8/23

IBEW Meeting

6 p.m. Centereach Knights of Columbus Hall, 41 Horseblock Rd., Centereach. A meeting for shift workers will be held at 3 p.m. in the union office. The agenda includes regular business, committee reports, and the president's report.

BERA Trips

Last week, *The Bulletin* inadvertently made some errors in the trip dates. Many apologies. The following dates are correct.

US Open: Tue., 9/7. \$65/ea. for admission, bus, parking, tip. Leave BNL 8:30 a.m., leave Open 7:30 p.m. Note: This is a regular BNL workday.

End of Summer Bash: Fri., 9/10. Bash at the Brookhaven Center, 6-11 p.m. \$5/ea.

Cabelas Shopping: Hamburg, PA. Sat., 9/11. Leave BNL 7 a.m., leave Cabelas, 4 p.m. \$20/ea., 55 tickets only.

NYC "Do As You Please" Trip: to San Gennaro Festival/Chinatown. Sat., 9/18. \$15/ea. Leave BNL 10 a.m., leave festival 6 p.m. 55 passengers only.

Bronx Zoo: Sat. 9/25. Leave BNL 9 a.m., leave zoo 5 p.m. All seats are \$23/ea.: includes bus, Total Experience ticket, & "4-D Theatre." Age two and under, on adult's lap: free. 55 tickets only.

NASCAR Race: At Dover Internat'l Speedway. Sun. 9/26. Leave BNL at 5 a.m., leave Dover at 6 p.m. 40 tickets available, \$110 per person. Seats are Section 217, Rows 27-29.



But none of that should stop your giving a can to help the hungry. BNL Food Drive containers are located in most buildings. The food is very much needed. Thanks.

BNL Music Club Event, 8/13

All are welcome to an evening of Music by Nina, Etc., with comedy by Stevie GB — the world's funniest accountant — from 5 p.m. on Friday, August 13, at the Brookhaven Center Club North Room, to say "Bon Voyage" to BNL Music Club member Joe Devoe. The cost is \$10/person. RSVP to Joe Vignola, vignola@bnl.gov, Ext. 3846.

Car-Wash Fundraiser by AdoptaPlatoon, 8/20

The Brookhaven Veterans Association's AdoptaPlatoon team is looking for volunteers to help raise funds to support troops in Afghanistan. AdoptaPlatoon is hosting a car wash at the Fire House on Friday, August 20, from 11 a.m. to 1 p.m., with a raindate on Friday, August 27. They need help, so if you can spare an hour, please e-mail John McCaffrey at mccaffrey@bnl.gov. Lab folks are asked to please support this function at the Fire House on August 20 or 27.

Classified Advertisements

To apply for a position, go to www.bnl.gov. Select "Job Opportunities," then "Search Job List."

LABORATORY RECRUITMENT - Opportunities for Laboratory employees only.

SENIOR ADMINISTRATIVE ASSISTANT (A-5) - Requires some secretarial or office administration training, plus 10 years' related work experience (including two years as a BNL Administrative Assistant) showing progressively more complex responsibilities in a substantive and relevant administrative role. This experience must demonstrate the aptitude necessary to successfully perform the duties as outlined in the position job summary. A bachelor's degree in a business field with coursework, or training, specifically related to the position requirements may offset qualifying experience, with the exception of the two years at BNL as an Administrative Assistant. Discretionary and confidential handling of sensitive information is essential, as is the ability to work in a fast-paced office with quickly changing priorities. Must possess strong organizational, decision-making, and communication skills, both oral and written, with strong interpersonal skills. Demonstrated mastery of Microsoft Office suite, with a thorough knowledge and ability to interpret and apply Laboratory policies and procedures is required. Must be proficient with BNL business computing systems such as PeopleSoft Financials and HR. Operates with a minimum of supervision and utilizes the necessary initiative, tact and discretion in addressing complex internal and external administrative issues. Performs complex administrative assignments and handles daily work flow including scheduling challenges across multiple contacts with complex calendars. This position provides highly visible administrative support reporting to the Associate Lab Director (ALD) for the Basic Energy Sciences Directorate. Responds to unusual circumstances which may arise in the absence of the ALD and interfaces with senior departmental or Lab management on sensitive matters. Acts as ALD's assistant to ensure that all administrative responsibilities and assignments of the office are fulfilled and completed. Issues responses on more complex correspondence under own signature. Is authorized to approve a significant variety of documents. Independently resolves complicated problems or issues with senior management in areas such as personnel, procurement, safety, training, and facilities. Analyzes data from several sources and compiles reports for departmental projects or organizational committees. Regularly responds to requests for information from the Lab, DOE and outside organizations. May assist the Director's Office administrative personnel in a full range of support functions. Apply to Job ID #15453.

CUSTODIAN (LG-1) - Under general supervision, performs general cleaning and housekeeping duties in all Laboratory housing units. Staff Services Division. Submit Transfer Request form to Diana Hubert in HR, Bldg. 400B. Job ID #15454.

OPEN RECRUITMENT - Opportunities for Lab employees and outside candidates.

SENIOR BUDGET SPECIALIST (A-8) - Requires a bachelor's degree in accounting, business administration or equivalent plus a minimum of 10 years' relevant experience. Excellent oral and written communication skills as well as organizational and analytical skills are essential. Must be able to exercise a considerable degree of initiative and judgment in a very complex budget and administrative environment and function in a deadline driven environment. Proficiency in Excel and other MS Office products highly desirable. Experience with PeopleSoft financial applications a plus. Will provide direct oversight of funding and support for departments within the Global & Regional Solutions Directorate (GARS) and advise senior management regarding strategic financial decisions. Responsibilities will include estimating, budget formulation and forecast development, rate development, analysis of cost and commitment and preparation of financial reports for management. Position will report directly to the Business Operations Manager for the GARS Directorate. Apply to Job ID #15449.

SENIOR HEALTH & SAFETY PROFESSIONAL (P-7 or P-9 level dependent upon relevant knowledge and skills) - As a Senior Health & Safety Professional for the Safety & Health Services Division, will conduct and coordinate the Lab Environment, Safety & Health (ESH) review of new and modified facility designs; assist in facility operational and exit readiness evaluations; be a technical resource for code and standards compliance; coordinate the Environment, Safety, Security, Health & Quality (ESSH&Q) inspection program (also known as Tier 1 inspection program); and facilitate incident/injury investigations. Must demonstrate an ability to analyze safety performance trends, communicate technical information in a clear and concise manner, and interact with individuals with diverse backgrounds and levels of understanding such as senior management, technical workers, engineers, scientists, and trade workers. Requires a bachelor's degree in: industrial, mechanical, safety, civil, nuclear, or electrical engineering; or a closely

related field. Requires a minimum of seven years' work experience showing increasing independence and responsibility as a practicing health and safety professional in an industrial or research laboratory setting. Specific experience in a Research and Development environment a plus. Professional experience must demonstrate the ability to initiate, develop, and lead projects or programs effectively with minimal supervision. Should have knowledge of pertinent local, state, and federal laws, ordinances, rules, and regulations; principles and practices of industrial and occupational safety/health programs; report preparation and statistical analysis; and principles and techniques of presentations and training. Strong background in health and safety regulations and building codes highly desirable. Must demonstrate broad knowledge in and familiarity with mechanical and electrical systems, engineering design drawings, and 29 CFR 1910 regulations and national consensus standards, such as NFPA, ANSI, and ASME. Safety & Health Services Division. Apply to Job ID #15425.

Motor Vehicles

06 CHEVY AVEO - a/t, a/c, am/fm, gd cond. \$5,600. Greta, 516-449-0305.
05 TOYOTA SIENNA XLE - 127K mi. well maint, hwy mi, pwr lthr htd seats, pwr drs, 3rd row seatg. \$12,500. 646-283-3221.
05 HYUNDAI ELANTRA GLS - 57K mi. 4 dr, 30+mpg, prem stereo/ CD, new brakes/tires/trans, \$6,500 neg. amanda, Ext. 5225.
03 FORD EXCURSION E BAUER SPORT UTIL - 73.75K mi. 4wd, k/less ent, seats 7, new fr end, univ jnts. \$17,000 neg. 399-1125.
03 HONDA VTX1800C - 7.58K mi. mint w/ new Metzler tires, saddle bags, custom exhaust, much more. \$6,600 neg. 281-2002.
01 FORD EXPEDITION - 145.75K mi. gd cond, dial a/c, 3rd seat, seats 8, towing pkg, new batt & fr end. \$5,950 neg. 399-1125.
00 BUICK ULTRA - all leather clean all hway mi blk w/tan int. \$3,000. 589-5555.
99 FORD ESCORT - 110K mi. a/t, 2L, 4 dr sdn, a/c, elec dr, cass, ABS, gd brakes, new tmg belt, more. \$2,600 neg. 516-469-2262.
98 JEEP GRD CHEROKEE - 195K mi. p/s, p/b, p/w, a/c, a/t, 6cyl, am/fm/cd/cass, gd tires/brakes, Must Sell. \$1,975. 334-1416.
97 JEEP GRAND CHEROKEE LAREDO - 155K mi. 4x4, many new parts, trailer hitch. \$3,000 neg. Mark, Ext. 3970.
94 JEEP GRAND CHEROKEE LIMITED - 122K mi. loaded, 4WD, towing pkg, runs v/well. \$2,500 neg. Karl, Ext. 3116.
92 FORD WINDSTAR - 115 mi. gd cond, seats 5, a/t, am/fm/cass, p/w, green, runs well. \$950 neg. 334-7495.
TIRES - Pair: Pirelli P-6 Four Season, 205-55-16, 70-80% tread, \$120/pr. 428-4149.

Boats

26' WELLCRAFT NOVA SPYDER - '87 spd boat w/twin merc cruisers, gd cond, tandem trailer incl, \$4,000 neg. 235-0910.
12' MAINSTREAM KINGFISH - sit on to kayak, set up to fish, paddle, compass, crate, kayak carrier. \$650 neg. Ext. 3823.

Furnishings & Appliances

AIR PURIFIER - Holmes Tabletop Air Purifier/Ionizer, works v.well. \$10. 821-1271.
BED FRAME - double size, \$15. 821-1271 or difilip@bnl.gov.
COLOR TV - 24" RCA micron w/built-in VCR, \$75; Trouser Press, Home Touch, brand new/\$50. 334-9682.
DESKS - Two prof-qual, melamine: 45" Wx30"Dx29"H. Med. oak or light gray finish w/2 drawers. Ask \$60 ea. Gerri, 821-2507.
ELECTRIC STOVE - \$250 excel cond, chrome clothes rack/\$20; filling unit/\$20; Nina, Ext. 5894, 475-1297.
GLIDER ROCKER - maple chair, \$215; gd for relaxation. lcade@uspsports.com. Laurie, 516-740-8418.
KRUPS AQUACONTROL KETTLE - 1 liter compact cordless, brand new in box, \$25. Ext. 5873.
MOVING SALE - bed box w/mattress/\$100; Office chr/\$40; Samsung 24" LED w/TV tuner/\$200; Laser printer/\$5. 516-469-2262.
PORTABLE SALON HAIR DRYER - Hot Tools Professional, never used, in box, 4 heat settings, \$30. 334-968.
SOLID CHERRY DRESSER - w/sep wall mirror, excel, orig owner, 7 Eng. Dovetail drawers, pics avail, price neg. 775-8160.
Audio, Video & Computers
CD'S - 14, variety, call or email for names of artists, \$10. 821-1271, difilip@bnl.gov.
GUITAR HERO II - for XBOX 360, used \$10. Donna, Ext. 2716, 878-2425.
NIKKOR 18-200MM VR LENS - AF-S, DX, Vibration Reduction for Nikon SLR, D40 included, mint, box incl/\$600. Ext. 3970.
NIKKOR 50MM F/1.8D - used 2or 3 time, mint, box incl, \$100. mwahlert@bnl.gov.
PLAYSTATION 3 + VIDEO GAMES - like new, 60 gig, fully equip, plus video games, all incl, \$300/neg. Yvette, Ext. 5591.
PORTABLE SATELLITE RADIO - Hand-held w/built-in antenna headphones, can record, \$30. Angela, Ext. 7397.
PROJECTOR CEILING MOUNT - Sanus Systems, "Univ Video Proj mnt for home theaters, offices". \$50. 821-1271.
PS2 PLUS 3 GAMES - PlayStation 2 w/2 w/less rem. cntrlrs/mem card, soccer 06, nfs etc, \$80. s.horkil@hotmail.com.
SAMSUNG 24" w/TV tuner, model T240HD, \$200. Chuan, 516-469-2262.

Sports, Hobbies & Pets

BOWFLEX MOTIVATOR - w/lat pulldown & leg exten, excel cond, \$425. 902-5453.
ELECTRIC GUITAR - Epiphone Special II, Ebony, new, autographed by Joe Bonamassa, ask/\$450. 902-5453.
FERRET CAGE - like new, used a handful of times. ask/\$35. Linda, 399-1125.
FOR SALE - PILATES POWER GYM - Pilates Power Gym - brand new, still in box. As seen on TV. Price \$200. Ext. 2280.
MOTORCYCLE JACKET - Joe Rocket, Ballistic Series, Meteor 4 jacket w/liner, size sm, \$200/new, \$45. Linda, Ext. 3750.
STAMPIN' UP - new, "2 pads, rose/blue "Rollagraph(party) "12 bold brights "11 "Eat Cake" + stamp cleaner) \$20. 821-1271.
WOMENS BIKE - Huffey, 3spd, gd cond/\$50. Donna, Ext. 2716, 878-2425.

Tools, House & Garden

STORAGE UNIT - cubical, in box, \$25; Powerchill hot/cold thermoelectric cooler, 40 qt capac, \$50. Donna, Ext. 2716.
WHEEL CART - Rubbermaid, approx 8 cubic ft, \$50. Donna, Ext. 2716, 878-2425.

Miscellaneous

BELLY DANCE SHOW & BUFFET - Sat, Aug 7, 8-pm, buffet w/ Indian Cuisine at 7pm, Admiss \$39.95/incl buffet & show, Palace in Commack. Kiran, 462-0003.
BOUNCY SPRING HORSE - Disney Princess horse, excel cond, ask/\$50. Ext. 3924.
FINE GOLD ROPE CHAIN - 14K, pd/\$59.99, ask/\$30. Linda, Ext. 7187.
LITTLE TYKES WAGON - 35"x16"x7", rem-ovl sides, \$50; 878-2425, storan@bnl.gov.
PAINTBALL GUN - Spyder Rodeo w/hopper, CO2 tank & carry case. Excl cond. Ask \$130. Paintballs/holster avail. 790-2205.
PORCELAIN VICTORIAN DOLL - 27" LTD handcrafted by doll artist. w/COA & stand in orig box, pics, \$68. 395-6784.
ROCKER - infant to toddler, \$30; baby changing table/\$20; 0-7 yrs Girls' clothing \$2/ea; helicopter/\$5. Nina, Ext. 5894.
TICKETS - 2, for Bill Cosby Show, Westhampton Beach Performing Arts Center, Aug 13, 8:30pm, \$150/ea. 553-9301.
VW & AUDI REPAIR - Certified VW tech w/7 yrs dealer exper. All repairs, maint. Dealer parts only. Also rep other makes 484-9888.

Yard & Garage Sales

WADING RIVER - Sat/Sn, 8/7-/8, 9a-3p, clothes, toys, furn, househld, 24 Cliff Rd W, cross st N. Wdg River Rd. Joseph, Ext. 5741.

Free

MR COFFEE COFFEE MAKER - works fine. Steve, Ext. 4211 or musolino@bnl.gov.

Wanted

CAR TRAILER - open deck. Rich, Ext. 7294, 839-5831 or gambella@bnl.gov.
CAR WASH VOLUNTEERS - BVA-AAP needs volunteers in raising funds to support our troops in Afghanistan. Fri, 8/20 11a-1p, Fire House. Contact us if you can spare an hour! John, mccaaffrey@bnl.gov.
DOG/CAT FOOD DONATIONS - For pets of struggling families/elderly. Collection bins are in Bldgs: 134, 400, 510 x5864, 725, 901 & 902. Donations given to local food pantries. Kathleen, Ext. 3161 or kratto@bnl.gov.
NEW/GENTLY USED CLOTHES - all sizes, children's books, toys to be donated to 76 families in a shelter, Laura X4027, Kathleen, Ext. 3161 or kratto@bnl.gov.
RIDING LAWN MOWER - gd cond, running well, fair price. Denise, Ext. 7860.
USED GOLF CLUBS - looking for a set of used women's golf clubs for a beginner. Anna, Ext. 7132 or asweet@bnl.gov.

Farewell Gathering

JOE DEVOE - Music by Nina, Etc. & comedy by Stevie GB, the world's funniest accountant...RSVP: Joe V Ext. 3846 \$10; Center Club/ North Rm, Fri, 8/13, 5 p.m.

For Rent

CORAM - 1 bdrm, 800sq ft, 2nd flr w/balc, gated ent, cac/heat, outdr pool/laundry on site, exercise rm, tennis, lounge, avail 9/1 takeover lease. \$1,140/mo. 678-8061.
FARMINGVILLE - fully furn v/lg studio apt w/eik, v/lg bathrm, sep ent w/prkg, util/tv incl, use of pool and bkyd, no smkg/pets. \$1,100/mo. Beatrice, Ext. 3642.
MASTIC - 1 bdrm furn apt, priv ent/prkg, util/tv hook-up incl. \$800/mo. 772-8251.
MIDDLE ISLAND - new spacious 1 bdrm apt lg eik, new appli, l/r, bath, cac, pvt ent, incl all util, no smkg/pets, 1 mo sec. \$1,200/mo. 516-769-5370.
MIDDLE ISLAND - Artist Lake Condo: 1 bdrm, lower unit. cac, free gas heating/cooling, playground, pool, clubhouse, avail from Sept 1st. \$1,100/mo neg. 742-5890.
MILLER PLACE - 4 bdrm 2.5 bath furn home, while lab scientist owner on sabbatical, Oct 2010-Sept 2011, renter pays utils, shorter occup ok, \$2,000/mo. neg. 647-0649.
NORTH SHIRLEY - 2 bdrm apt on grd level w/sep ent, fen in yd and priv patio, all util incl. \$1,400/mo. Dana, 281-6701.
RIDGE - spacious 1 bdrm, bath, 7 min to Lab, pvt ent/drwy, all util incl, l/r, eik w/d, pet ok, tile/new carpet, fresh paint. \$1,125/mo. Mary, Ext. 8633, 236-9114.
SHIRLEY - 2 bdrm, nr. BNL, furn, rent incl heat/elect/water/cable/int, no smkg/pets. \$1,100/mo neg. Ext. 7448, tomw@bnl.gov.
SHIRLEY - 3 bdrm, 2 bath cape, fen yd, deck, wood flrs, full bsmt, no smkg/pets, avail 8/1. \$1,900/mo. John, 335-5645.



Roger Stoutenburgh CNY-117-86

This Sunday, 8/8, Visit RHIC — Atom-Smasher Extraordinaire

This Summer Sunday, August 8, is the last of this year. Visitors are invited to the Lab site to learn about the Relativistic Heavy Ion Collider, a world-class particle accelerator where physicists recreate conditions of the early universe to study the fundamental forces of matter. Stump a physicist and be amazed by the wonders of "Phenomenal Physics." This tour is appropriate for adults and children age 10 and over.

In addition, exciting science shows and entertaining activities for children and adults are all part of the free fun and learning opportunities offered to the public by BNL during Summer Sundays, which have been ongoing from July 11.

No reservations are needed to take part in Summer Sundays at the Lab, but visitors age 16 and over must bring a photo ID. Visitors may arrive any time between 10 a.m. and 3 p.m. Arrive early to avoid crowds and to take advantage of the full program.

The last facility visit takes place at 3 p.m. each week, and science shows will be held at noon, 1:30 p.m. and 3 p.m. each Sunday in Berkner Hall. A new hands-on exhibit, "Creating Our Future, Sustainability by Design," is available in the Berkner Hall lobby. The cafeteria and gift shop, both in Berkner Hall, will be open from 10 a.m. to 3 p.m.



The Rat Race Choir: (from left), Dave Chmela, bass, vocals; Adam Snyder, percussion, vocals; Craig Weinberg, guitar; and Larry McGowan, keyboards.

Rat Race Choir Rock Band Tonight, 8/6

Legendary band Rat Race Choir (RRC) will perform at Berkner Hall tonight, Friday, August 6, at 8 p.m. Also appearing on stage at this show will be rock bands Jebus and Memphis Crawl. Sponsored by the BNL Music Club, the concert is open to the public. All visitors to the Lab 16 and older must bring a photo I.D. Tickets are \$20 and may be purchased at the BERA Store or at the door.

Formed in 1968, RRC hails from Westchester, New York. However, their presence on eastern Long Island at venues in Southampton and Mitty's General Store in Water Mill has made them well known on the Long Island music scene. This progressive rock band has been performing their own musical compositions as well as classic rock songs from well-known rockers like Jethro Tull and Led Zeppelin. In the early 1970s the band was joined onstage by John Entwistle of The Who.

The RRC musicians are: Dave Chmela, bass, songwriting, and keyboards; Craig Weinberg, guitar; Larry McGowan, keyboards; and Adam Snyder, percussion and vocal, bass and piano.

— Jane Koropsak

SHIRLEY - grd level 1 br apt, l/r-d/r combo, kit & bath, part furn, 1 mo sec, no pets, incl heat, elect. \$900/mo. 433-8398.
SHOREHAM - studio or 1 bdrm apt, full eik w/cabinetry & pantry, bath w/Jacuzzi, storage, off-St prkg, cath. ceilings, wood flrs, no smkg/pets. \$975/mo. 774-0443.
SHOREHAM - spacious, clean 1 bdrm furn studio apt, sep ent & thermo, full bath, kit, patio, big yd, cable TV, no smkg/pets, 7 min to Lab, \$750/mo neg. 821-4318.

For Sale

BAYPORT - Gt. S. Bay, F. L. Wright style flat-roof house, .83 acr, v. priv. 3 bdrm, 2 & half bath, den, l/r/dr, kit, util. rm, screen prch, carport. Pssve solar, heat in flrs. 617-332-6264.
MANOR PARK - 3 bdrm ranch, complete renov, hrdwd flrs, eik w/den area, lg l/r w/ fp, bath w/jacuzzi, full bsmt w/flrg, 2 zone heat, 1 car gar, \$259,990 neg. 205-5300.
MIDDLE ISLAND - 4 bdrm, 2 ba brick cape, 1/2 acre, oak flrs, l/r w/f/p, d/r, eik, full bsmt,

deck w/ramp, new roof, wndws, elect, drway, carpet, \$270,000. 516-448-3933.
NASSAU COUNTY - corner hse, 4 bdrm, 2 full bath, eik, d/r, l/r, 2 sitting areas upstrs, heatd gar, frt&rear patios, det. rear deck, new gas heat. \$350,000 neg. 516-244-7186.
ROCKY POINT - 10 rms, 4 bdms, 3 bath, eik w/granite cntrtops, l/r w/fp & wet bar, d/r, fin bsmt, a/c, 2-car gar, 42x12' deck, igp, igs, 0.92 acres. \$455,000 neg. 744-7052.
S. PATCHOGUE - v/lg 3 bdrm ranch, 1 block to Bay, cac, eik, newly renov, l/r, formal d/r, den, full bsmt on .5 acre. \$330,000 neg. Jim, Ext. 4705, 929-4978.
SHOREHAM - 3 bdrm hse, study/office, fen acre, SWRSD, hwdws, cac, open flpln, dsigrn kit & bath, ss, vaulted sunrm, deck, hottub, \$6K tax w/Star. \$329,000. 849-2493.
WEST ISLIP - 3 BR ranch, 2 remod baths, f/p, fdr, 1/2 fin bsmt, 2car gar, w/extend workshop, refin. kit, breakfast area, oak cath ceilings, 1/2 acre. \$549,000 neg. 327-0106.