

SENIOR INFRARED PHYSICIST

Manager Infrared Systems

To perform experimental and theoretical research in infrared backgrounds, atmospheric transmission and infrared properties of gases. Will be responsible for the theoretical aspects of the program as well as data acquisition and handling. Requirements include a demonstrated capability in infrared studies and a familiarity with the state of the art in infrared detectors, radiometers and measurement techniques.

SENIOR INFRARED SYSTEMS ENGINEER

To join a group of instrumentation physicists and engineers who are developing advanced infrared systems. Requirements include a demonstrated capability in infrared systems design and a working knowledge of detectors, electronics, optical systems and specialized infrared techniques.

For further details, write in strictest confidence to:
John A. Haverfield, Manager—Professional Placement

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PHYSICISTS

We are currently seeking to add several senior physicists to our Staff. We are a small company working on the borderline between basic and applied research in government sponsored programs. Our areas of interest include: Magnetohydrodynamics, Nuclear Weapons Physics, Atomic and Molecular Interactions, and Upper Atmospheric Physics. We can offer a senior person the opportunity to do research of worth in these areas.

Our salaries are attractive and there are other benefits of interest such as company management by practicing physicists and location in Cambridge, Massachusetts near good libraries. In addition, we can offer a senior person the opportunity to initiate his own programs under company sponsorship.

If you have a Ph.D or equivalent, and demonstrated capability to perform independent research in one or more of the areas mentioned above, please write to:

Dr. S. L. Kahalas
Mt. Auburn Research Associates, Inc.
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WE HEAR THAT

Robert L. Sproull, formerly director of the Materials Science Center at Cornell University, has succeeded J. P. Ruina as director of the Advanced Research Projects Agency in Washington, D. C. Dr. Ruina, on leave from the University of Illinois, became ARPA's director in January 1961.

Louis R. Weber, has been honored with the Oliver P. Pennock Distinguished Service Award of the Abell-Hanger Foundation and Faculty of Colorado State University. Professor Weber is head of the Department of Physics at Colorado State.

New members in the Department of Physics at the University of Arizona are Stanley Bashkin from the State University of Iowa, who was named to the rank of professor, Theodore Bowen from Princeton and Douglas Donahue from Pennsylvania State University, who were named associate professors, and Tadayasu Mitsui from the University of Hokkaido in Japan and Lorne Mortara from Purdue University, who were named research associates. Yuzo Tomono of the Institute of Solid State Physics at the University of Tokyo is serving as a visiting professor at Arizona this year. John Robson, associate professor of physics has returned to Arizona after spending the last academic year with the National Science Foundation.

Newly appointed assistant professors of physics at the University of Pennsylvania include Daniel Hone, a recent National Science Foundation postdoctoral fellow at the École Normale Supérieure in Paris, Marshall Luban, a former NSF predoctoral fellow at the University of Chicago, Stuart Richert, previously a research assistant at Cornell University, and Roland Winston, who received his PhD from the University of Chicago last year.

The National Bureau of Standards has announced several new staff appointments and promotions in its Washington, D. C., and Boulder, Colo. laboratories. In Washington, Robert D. Huntoon has been named deputy director for basic standards and services in charge of the Bureau's newly established standard reference data program. A. T. McPherson, formerly an associate director of NBS and more recently an associate director of the Office of Technical Services, has returned to the Bureau as special assistant to the director for international standards. W. Wayne Meinke, professor of nuclear chemistry at the University of Michigan, has been appointed chief of the Analytical Chemistry Division at the Bureau, succeeding Harry C. Allen, who is now head of the Inorganic Solids Division. Anthony J. Bur and Frederick I. Mopsik have joined the Dielectrics Section of the Electricity Division. Edmund A. Di Marzio, formerly of Bell Telephone Laboratories, has accepted an appointment in the Polymer Physics Section of the NBS Polymers Division. New staff mem-

bers in the Bureau's Heat Division include **Susumu Takeda**, formerly professor of physics at Nagoya University, Japan, **John A. White**, previously a research associate at Yale University who was appointed to the Division's Heat Measurements Section, and **Jack H. Colwell**, a recent National Research Council of Canada postdoctoral fellow who has joined the Division's Cryogenics Section. **Richard C. Keezer** of the University of Michigan has become a member of the Solid State Physics Section of the Atomic Physics Division. In the Bureau's Boulder Laboratories, **Russell B. Scott**, who has served as acting director of the Laboratories, was appointed manager. **Lowell H. Tveten**, formerly assistant section chief of the High Frequency and Very High Frequency Section of the Laboratories, has been appointed chief of the Section. He succeeds **W. F. Urlaut**, who has become assistant chief of the Radio Systems Division.

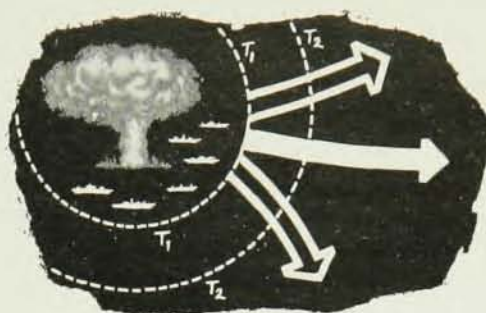
Hans Ekstein, a senior physicist at Argonne National Laboratory, will serve next year as visiting professor at the University of Aix-Marseille. Dr. Ekstein's tenure in Marseille, which begins next March, will include graduate lectures on quantum theory and research in collaboration with Daniel Kastler of the Faculté des Sciences de Marseille.

Albert D. Frost, professor of electrical engineering and director of the Antenna Systems Laboratory at the University of New Hampshire, will be on leave of absence from the University during the current academic year while serving as a staff member of the Institute for Defense Analyses in Washington, D. C.

Harry Soodak, associate professor of physics at The City College of New York, and **Francis Federighi** of the Knolls Atomic Power Laboratory are spending one year as guest physicists at the Swiss Federal Institute for Reactor Research in Würenlingen.

Northwestern University's Department of Physics has named four new assistant professors of physics: **David S. Schreiber**, a recent postdoctoral fellow at the University of California, **Charles T. Walker**, who received his doctoral degree from Brown University in 1961, **John Brehm**, who received his PhD from the University of Maryland last year, and **Chester Hwang**, formerly of the University of Minnesota.

William Reese has been named an assistant professor in the Physics Department of the US Naval Postgraduate School in Monterey, Calif. He was previously a research assistant at the University of Illinois. **Ali Kyrala** of the Naval Postgraduate School has received a Fulbright lectureship award and is spending the current academic year in Egypt as professor of physics and applied mathematics at the University of Alexandria.



ESCAPING RADIOACTIVITY

Problem: A convoy has been attacked by a thermonuclear weapon. What maneuvers will permit the ships to best avoid the radioactivity that will follow?

This is an example of the challenging tasks assigned to the Center for Naval Analyses of The Franklin Institute.

Several possible tactics have been evaluated by CNA analysts. Each has its advantages and disadvantages. If the convoy stays together and maintains course, possibility of collision is minimized, but the swiftest escape from contamination may not be attained. While other maneuvers may reduce the possibility of contamination, they may lead to confusion, minimizing the convoy's over-all progress, and increasing the danger of repeat attack. The conclusion is that one of the intermediate tactics is best.

CAREER OPPORTUNITIES in this and other problem areas are now available with CNA for Operations Analysts, Mathematicians, Physicists, and Engineers. For additional information, write:

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