WHAT'S NEW

This listing is intended only as a service to the reader by calling his attention to items of possible interest. No endorsement should be inferred. Item numbers correspond to numbers on the READER SERVICE CARD.

26. A PRESSURE TRANSDUCER which operates in nuclear environments from -320° to + 1000° F is supplied by Consolidated Controls Corporation, Bethel, Conn. Available in ranges of 0 to 0.3 lb/in.^{2} to 0 to 8,000 lb/in.^{2}, it uses an all solid-state device as the sensing module and has a response of 0.2 to 2 milliseconds.

27. TEXLIUM NETRON DETECTORS have been improved by the manufacturer, Texas Nuclear Corp., Des Plaines, Ill. to provide resolution down to, reliable performance from -70 to +200°C, voltage plateaus of >250 V, and diameters ranging from 1/4 in. to 2 in.

28. ATOMIC ACCESSORIES, Inc. has come out with several nuclear instruments not previously in their catalog: A low cost *automatic sample changer,* which accepts 25 planchets 1 in. - 2 in. dia., uses a gas flow detector and a transistorized scaler having a resolving time of 5 microseconds. A *radiochromatogram scanner* is designed so that the paper being counted passes between two detectors arranged to count in a vertical plane, a feature said to minimize contamination of a detector by falling fibers which have rubbed off the paper. Another *thin-layer two-dimensional* radiochromatogram scanner locates and counts radioactive areas on glass plates from 1 in. x 8 in. to 8 in. x 8 in., plotting the results on a X-Y recorder using a 1:1 ratio between the glass plates and the recorder paper. A miniaturized lightweight low-cost *air-sampler* which can be worn around the neck for checking breathing air uses a disposable filter holder which protects samples until ready for analysis. A new *scaler-rate meter* has several features which are said to recommend it particularly for training programs in nuclear science. A transistorized "CUTIE PIE" *survey meter* uses an ion chamber with a 0.7 mg/cm^2 aluminized mylar window protected by a movable shutter which discriminates between betas and gammas; an accuracy of ±15% of true dose over the 30 keV - 2 MeV range is claimed. A *tritium monitor* with a self-contained buzzer warns whenever H^3 concentrations in air exceed permissible levels.

29. THE NANOLYZER is said by its manufacturer, Radiation Instrument Development Laboratory, to be an important advance in multi-channel pulse height analyzer design in that it will accept, analyze, store, and display data seven to fifty times faster than conventional analyzers. Features permitting this include a thin-film memory plane and a 100 megacycle analog-to-digital converter providing a 10 nanosecond per

channel address rate. The RIDL Model 39-6 digital pulse-height analyzer eliminates the problem of multi-channel analyzer system gain and zero drift and permits use of an analyzer without recalibration over extended periods of time, regardless of independent drifts in the detector, high voltage supply, amplifier, and analog-to-digital converter.

30. A MICROLITER SYRINGE offered by Hamilton Co., Whittier, Cal., uses a plunger travel of 5.5 cm to deliver 1.0 μl liquid samples into a gas chromatograph with a reproducibility of + 1% or 0.05 μl at + 2% Graduations are 0.01 μl.

31. LIGHT WIRES, a fascinating eight-page booklet published by Bausch and Lomb, describes the principle of operation and some of the applications for the fiber optic bundles which they supply. These bundles are as flexible as electrical wire, unaffected by dirt, and protected against crushing or bending. They permit light to be piped literally through a conduit; a simple butt contact serves as a splice.

32. Copies of the **SAE AEROSPACE RECOMMENDED PRACTICES BULLETINS** 598-A, 785, and 743, which outline methods for counting particulate contamination in air and liquids are available free of charge from the Gelman Instrument Co., Ann Arbor, Mich. New pieces of equipment recently announced by this company include a high volume *air sampler*, a *vinyl membrane filter*, and several *filter holders*.

33. A NEW FAMILY OF MATERIAL, metal powders which, by virtue of being incorporated with non-metallic compounds, can be cold set without pressure, is available from the Chemtree Laboratories, Central Valley, N. Y., in a variety of formulations. In general, they may be stored indefinitely while dry and formed to any shape after adding water. The wet mixture may be sprayed, poured, or trowled in place. The possibility of varying the proportions of the ingredients over a wide range makes some of the mixes attractive for *neutron* and/or *gamma shielding*.

34. RADIOCHEMICAL PRODUCTS AND SERVICES is the title of the new catalog and price list put out by ChemTrac, the radiochemical division of Baird-Atomic, Inc. This thirty-page booklet describes certified tagged chemicals, precision reference sources, and radioanalytical services offered.

35. A 36-page handbook entitled **GRAPHITAR**, published by the United States Graphite Co., contains detailed information on the physical and mechanical properties and applications of this material together with design data and suggestions for fabrication and operation. One section of the handbook explores individually the unique characteristics of this material.

36. RADIOACTIVE CHEMICALS CATALOG-L is a comprehensive 74-page book describing the labelled compounds, sources, radionuclides, and services offered by New England Nuclear Corp., Boston, Mass. The book uses three colors to produce an attractive appearance and to serve the practical function of indicating at a glance the radioactive atom in the organic compounds listed.

37. The seventh edition of the familiar General Electric **Chart of the Nuclides** has now been published. Data available up to December 25, 1962 were used by David T. Goldman in making the revision.