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The
Laser Analytics
Letter.

Please write or send business card to receive copies of "THE LASER ANALYTICS LETTER" reporting new developments in IR Tunable Diode Laser technology, R&D applications, industrial case histories, and other informative data.

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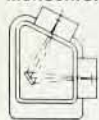
Tailor-Made Monochromator



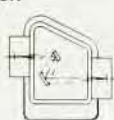
- dispersion of synchrotron radiation
- spectral scanning of UV laser and fluorescence emission
- absorption and emission spectroscopy
- calibration of detectors and films
- tunable UV radiation sources
- laboratory astrophysics
- plasma diagnostics
- optics calibration
- double beam applications

TAILOR-MADE MONOCHROMATOR for your experimental requirements...A flexible 0.2m Vacuum Monochromator.

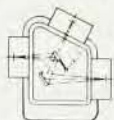
U.S. Patent NO. 4,268,170



VM-502-V
Conventional



VM-502-S
"Straight Thru"



VM-502
With All 3 Slits

Vacuum UV-UV-VIS-IR
operation (from below 300Å)

Aberration - Corrected
concave holographic
grating, kinematically
mounted

Fabricated Housing
UHV model available

Fast Optical System
F/4.5 nominal

Wavelength-optimized optics
Interchangeable diverter mirrors may be coated as individual reflective filters (e.g. for VUV-UV laser lines at 1460, 1720, 1930, 2484, 3080, or 3511Å) for high peak efficiency and low out of band reflectance; kinematic mounts allow quick replacement without realignment.

Standard broad-spectrum Al-MgF₂ coatings allow efficient operation above 1150Å, with 80% typical reflectance at 1216Å. Extreme UV coatings of osmium are supplied for short-wavelength operation.

Compatible ARC Accessories: ☐ Light Sources, ☐ Power Supplies, ☐ Diffusion Pumping System, ☐ Sample Chambers, ☐ Detector Assemblies, ☐ Model 50 Filter Assembly



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**PRECISION OPTICAL
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letters

any salary from his university. Today, he would be forced to study financing and tax shelters just to prevent the quick erosion of his inheritance by inflation and tax.

Since Sputnik, APS membership has gone up threefold while the reputation of physics has changed from "brilliant" to "difficult but not necessarily exciting, with poor job opportunities." Previous discussions on these changes have appeared in the letters column (April 1970, page 10; June 1970, page 11; July 1970, page 13; September 1970, pages 13, 67; October 1970, page 9; December 1971, page 11; and so on). They are usually dismissed as cynics or Chicken Littles. There should be contingency plans for steady-state physics instead of expanding physics. Careers of physicists are far longer than those of professional football players, yet many physics departments appoint as many postdoctoral fellows every year as the draft choices of Washington Redskins. A Nobel laureate may work in any field of his or her choice, but there is simply very little room for the less talented foreign student to work on gauge field theories (either here or at home). Yet recruitment continues, and now 40% of physics graduate students are foreign. (Sometimes, graduate study is the first step toward permanent residency in the US, and there are more teaching assistantships available in physics than engineering or computer science.)

I do not advocate a defeatist attitude, yet we do need a realistic attitude toward decline. The discussion of any unpleasant subject cannot be completely pleasant.

T. TSANG
Howard University
Washington, D.C.

12/84

Soviet nuclear position

One method of attacking a scientific or political position is to characterize it as the position held by some unpopular group. Lysenko was able to use this method successfully in his corruption of Soviet genetics in the 1930s.

Suraj N. Gupta (February, page 86) complains that letters supporting the APS Council resolution on nuclear war have "defended the Soviets' position on SALT II, arms control, and nuclear freeze."

If the Soviet position on arms control supports SALT II and a bilateral, verifiable nuclear freeze, I can only be glad that the Soviets are in agreement with me and with other APS members.

EDGAR VILLCHUR
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3/84 Woodstock, New York □