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Cover: On the walls of this recently built recording-studio control room are special panels designed to scatter sound evenly throughout a room. Such reflection phase gratings are constructed according to "quadratic-residue" sequences, defined in a branch of mathematics that once appeared to have no practical value. (Photo: BPG)



### **Departments**

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## Letters

### 'The nonsense about quasicrystals'

There is no doubt in my mind that my explanation of the quasicrystal phenomenon ("Probing deeper into quasicrystals," SN: 11/2/85, p. 278) is correct. I have now accounted for the atomic arrangement seen on the electron micrographs. I trust that my paper containing these additional arguments will be published in Physical Review Letters.

I think that it is interesting that an intermetallic compound that I investigated in 1922, and whose structure was determined 40 years later, has the same structure as these "quasicrystals," but without the twinning that they show. This is the compound sodium dicadmide, which is mentioned in my NATURE article.

It is also interesting that the scientific journals are printing scores of papers about exotic explanations of the observation but that I have difficulty getting my papers on the subject published.

I think that I am almost the only, perhaps really the only, X-ray crystallographer who has

become interested in this subject. The explanation probably is that the other X-ray crystallographers felt that the nonsense about quasicrystals would soon fade away. That is how I felt for about five months, and then I finally decided that I would look into the matter.

Linus Pauling

Linus Pauling Palo Alto, Calif. therapy outweighs the risk of getting heart disease or some other serious illness. Research supplies the risks and benefits to a patient regarding certain drugs, but the medical profession rarely gives the patient the right to choose to use the drug or not to use it.

Donna J. Dubel Towson, Md.

### The patient's right to choose

"Estrogen use raises questions" (SN: 11/2/85, p. 152) describes the importance of knowing and understanding the pros and cons for the use of these hormones. The question of choice is now an important factor. What if future studies find the use of hormones dangerous? Will the medical professionals deny their use to women even though they may be suffering severe menopausal symptoms including osteoporosis?

It is high time that doctors allow patients to make more of their own decisions. A patient with osteoporosis or other menopausal symptoms may find that the benefit of hormone

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