Table 1. Atomic coordinates for azulene.

| Atom | x/a | y/b | z/c |
|----------|--------------|------|-------|
| Cı | 0.033₅ | 0.09 | 0.760 |
| C_2 | 0.1345 | 0.29 | 0.819 |
| C_3 | 0.153 | 0.45 | 0.700 |
| C_4 | 0.039 | 0.47 | 0.387 |
| C_5 | - 0.060 | 0.41 | 0.212 |
| C_{6} | - 0.136 | 0.21 | 0.186 |
| C_7 | -0.171_{5} | 0.03 | 0.281 |
| C_8 | -0.106 | 0.02 | 0.462 |
| C_{9} | - 0.0095 | 0.15 | 0.581 |
| C_{10} | 0.060 | 0.35 | 0.530 |

to the (010) plane. The general scheme of the crystal structure is similar to that of naphthalene (4). The shortest distance between atoms in neighboring molecules is 3.6_1 A. Details of the molecular configuration require a three-dimensional analysis. This is in progress.

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References and Notes

- H. Günthard, Pl. A. Plattner, E. Brandenberger, Structure Reports 11, 713 (1948).
 H. Günthard, *ibid.* 13, 562 (1950).
- 3. This analysis is supported by grant A-228 from the National Institutes of Health. X-RAC and S-FAC calculations are supported by contract No. N6-onr-269, T. O. 16 with the Office of Naval Research. We are indebted to Pl. A. Plattner of Hoffman-La Roche in Basel for introducing us to the problem and furnishing crystalline material, to V. Vand for helpful discussions, and to Mrs. J. W. Turley for IBM commutation of structure factors
- computation of structure factors.
 J. M. Robertson, Proc. Roy. Soc. (London) A 140, 79 (1933) and 142, 674 (1933).
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9 February 1956

International Relations in

Science and Problems of Visas

In this brief report I wish to relate factually the events of the failure to bring to the United States a distinguished French astronomer for a conference 3–5 April 1956 that was sponsored by the National Science Foundation and the Leander McCormick Observatory of the University of Virginia.

On 3 May 1955, the steering committee of the conference drew up a list of twenty specialists in the field of cosmic distance determination. Daniel Chalonge of the Institut d'Astrophysique, Paris, France, eminently qualified in this field, was included in the list. Since Chalonge on a previous occasion had had difficulties in obtaining a visa, it was thought advisable to make inquiries with the State Department before inviting him. This was done through the Office of the

Division of International Relations of the National Academy-National Research Council, the channel through which scientists handle matters of this type. In a letter dated 21 June 1955 to the division, I stated, "Before inviting Dr. Chalonge to take part in this conference I am anxious to learn the attitude of the State Department in view of the past history of the case. I do not wish to embarass him, our government nor ourselves. I understand the difficulties of the situation. We may be told that the case cannot be considered until he applies for a visa but I am afraid this will not solve the problem." The letter also included a long paragraph relating to the history of the previous failure as far as known to me. Early in August 1955, while I was in Oslo attending a meeting of the International Council of Scientific Unions, I was informed verbally by a member of the staff of the Science Advisor to the State Department, and in the presence of the other members of the American delegation, that on the basis of information he had received, I should proceed to invite Chalonge. With this assurance we extended the invitation late in August 1955, during the meeting of the International Astronomical Union in Dublin, Ireland.

I know that Chalonge spent much time during the succeeding months preparing for his visit to the United States, which was to include colloquium lectures at eight astronomical centers in the eastern United States following the Virginia conference. I understand that Madame Chalonge visited the U.S. Consulate in December 1955 and that she was informed that they had plenty of time for application for the visa. In January 1956 they applied and planned to sail on 22 March. Since by the middle of February they had received no reply, I wrote to the office of the Science Advisor on 22 February. The reply stated "Apparently Dr. Chalonge applied for his visa only recently. If he had followed the suggestion that I passed along to you, and you to him, last August of applying for his visa promptly, he probably would not have had any current worries." Here some misunderstanding must have occurred, for I do not recall being instructed of "prompt application," and the Paris Consulate did not indicate its need. On 2 March, I telephoned the Office of International Relations of the Academy and after they had consulted the State Department, they informed me that there were no complications and that the visa would be issued. On 12 March I telephoned again and I was told that the matter was being taken up with the Attorney General and that it would take a week or at the most 10 days for processing the case but I could rest assured that the action would be favorable. I advised Chalonge accordingly and suggested that he change the time of his departure to 29 March which I knew beforehand it was possible to do.

On the evening of 28 March, the day before his planned sailing, the U.S. Consulate informed him that since he is a member of the French-USSR Cultural Society, which under the American law is considered a communistic group, his visa could not be issued for more than three days, the duration of the conference. Under these conditions Chalonge refused the visa and wrote as follows.

"Dans ces conditions, je n'ai pas cru pouvoir accepter le visa car il était un peu humiliant pour moi d'être ainsi sous le contrôle de la police, comme un malfaiteur.

"J'ai pris cette décision avec beaucoup de peine en pensant aux efforts qu'ont fait mes amis américains pour me faire venir."

It is unfortunate that Chalonge felt that his limited visa implied police control. To be notified only at the very last moment of departure and be told that he is permitted to stay in the United States for 3 days only seems most unreasonable.

All this is, of course, regrettable for all parties concerned, including the State Department and the Attorney General's office.

In conclusion, I wish to emphasize that the aim of this report is to give all the facts as I know them with the hope that they might contribute in remedying a situation which is detrimental to science and our international relations.

Last August at the International Astronomical Union Meeting in Dublin, the American Delegation was authorized to extend, on behalf of the U.S. Government, an invitation to the union to hold its 1961 General Assembly in the United States. If such a meeting takes place, some 400 foreign astronomers may be coming. It seems obvious that under existing conditions careful consideration of this problem is needed, and before our General Assembly in 1958.

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22 June 1956

Neoplastic Changes Developing in Epithelial Cell Lines Derived from Normal Persons

That animal fibroblasts grown continuously in tissue culture can develop the ability to produce tumors considered histopathologically as sarcomas has been demonstrated on numerous occasions (1). The present report concerns the acquisition of a similar ability by four strains of human epithelial cells which