

sich durch (12)(34) ineinander überführen. Das Reduktionsergebnis hängt daher von der Ausgangsform ab.

(2) Da der Maßtensor

$$\begin{pmatrix} 10 & 0 & -0,1 & -0,2 \\ 0 & 10 & -0,2 & 0,5 \\ -0,1 & -0,2 & 10 & -0,2 \\ -0,2 & 0,5 & -0,2 & 1 \end{pmatrix}$$

bei $i = 2, j = 4, k = 1$ die Bedingung 4.2 der Definition 1 nicht erfüllt, erfolgt eine Transformation $a_2 \leftarrow a_2 - a_4$, um sie zu erfüllen. Eine hierauf folgende Transformation, die die Bedingungen 4.1 und 2 veranlassen, führt ihn jedoch in seine Ausgangsform über. Er läßt sich also nicht durch eine endliche Anzahl von Schritten halb reduzieren.

(3) Die Maßtensoren

$$\begin{pmatrix} 10 & -1 & -1 & 0,2 \\ -1 & 10 & -2 & 0,1 \\ -1 & -2 & 10 & -0,1 \\ 0,2 & 0,1 & -0,1 & 1 \end{pmatrix}$$

und

$$\begin{pmatrix} 10 & -1 & -1 & -0,2 \\ -1 & 10 & -2 & 0,1 \\ -1 & -2 & 10 & -0,1 \\ -0,2 & 0,1 & -0,1 & 1 \end{pmatrix}$$

stellen ein gleiches Gitter dar, weil das Vertauschen $a_2 \leftrightarrow a_3$ und der Vorzeichenwechsel von a_4 sie ineinander überführen. Ein Reduktionsversuch gerät jedoch in eine Totschleife, in der die beiden Matrizen alternierend als Zwischenergebnis auftreten. Diese Schwierigkeiten röhren davon her, daß die Bedingung 4.1 die Reihenfolge von a_2 und a_3 im vierdimensionalen Raum nicht eindeutig festlegt.

(4) Man stelle sich eine dreidimensional modulierte, ortho-

rhombische Struktur mit $a = 5$, $b = 6$, $c = 7 \text{ \AA}$ und $\sigma = (0,2\ 0\ 0 / 0\ 0,3\ 0 / 0\ 0,0,1)$ vor. Das sechsdimensionale Gitter sei allseitig flächenzentriert: $(0, 0, 0, 0, 0; 0, \frac{1}{2}, \frac{1}{2}, \frac{1}{2}, \frac{1}{2}; \frac{1}{2}, 0, \frac{1}{2}, \frac{1}{2}, \frac{1}{2}, \frac{1}{2}; \frac{1}{2}, \frac{1}{2}, 0, \frac{1}{2}, \frac{1}{2}, \frac{1}{2})$. Ein Versuch, dieses Gitter zu reduzieren, scheitert an einer Totschleife. Die Ursache ist ähnlich wie bei (3).

Trotz der eben aufgeführten Mängel ist das Reduktionsverfahren durchaus brauchbar, solange es für die Identifizierung mehrerer verschiedenartig aufgestellten Superraumgruppen einer modulierten struktur bzw. Eines Kompositkristalls benutzt wird. Da in diesem Anwendungsbereich praktisch immer $s_{ii} \gg 1$ ($i = 1, 2, 3$) gilt, treten diejenigen Maßtensoren wie in Beispiel (1) auf keinen Fall auf. Bei den Beispielen (2) und (3) handelt es sich um trikline Strukturen. Die zufällige, unwahrscheinliche Übereinstimmung der Tensorelemente ist die Ursache der Schwierigkeiten. Dagegen zeigt Beispiel (4), daß die vorliegende Methode total versagt und eine Verschärfung bzw. Verfeinerung der Nebenbedingungen dringend nötig ist.

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Notes & News

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AsCA '92, Singapore, 13–16 November 1992 Inaugural Conference of the Asian Crystallographic Association

First circular

AsCA '92 is the inaugural conference of the Asian Crystallographic Association (AsCA). It is jointly sponsored by the Crystallographic Society of Japan and the Society for Crystallographers in Australia, with financial support from various organizations including the International Union of Crystallography.

AsCA was founded in 1987 for the promotion and collaboration of crystallographic activities in Asia. It represents 17 crystallographic organizations from this region and is a Regional Associate of the International Union of Crystallography. This conference is intended to fulfil one of its prime functions: the promotion of better communication and contacts between Asian crystallographers.

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Conference format

AsCA '92 will be a high-level conference on frontier topics in crystallography. The scientific sessions will span three full days, 14–16 November inclusive. Each day's programme will include three consecutive oral sessions and a poster session. The conference language will be English. There will be a welcoming reception on the evening of 13 November and a farewell banquet on the evening of 16 November. The other evenings will be free.

Scientific topics

The central theme to the conference will be X-ray, electron and neutron scattering. However, contributed papers are invited from all areas of crystallography. On each day a plenary session will be devoted to new developments for a particular type of radiation. The other six oral sessions and a parallel poster session will cater for studies of biological, inorganic, mineral and small-molecule structures, for diffraction physics, for powder diffraction and for the application of new crystallographic techniques to such areas as thin films, surfaces, materials science and protein engineering. Special emphasis will also be given to studies involving synchrotron radiation.

Invited speakers and topics include:

R. Chidambaram:	Neutron sources and applications
Fan Hai-fu:	Image processing with HREM
K. Hiraga:	Advances in HREM
N. Sakabe:	Biological uses of synchrotron radiation
T. Tsukihara:	Virus structures
J. W. White:	Neutron scattering-length variation

Venue

The conference venue is the Regional Language Centre (RELC) on Orange Grove Road, five minutes walking

distance from Singapore's famous Orchard Road shopping district. Singapore is a clean, vibrant and friendly city with an excellent reputation for hosting international meetings. The RELC complex has, in addition to conference facilities, good accommodation for up to 120 participants. Other excellent hotels are within easy walking distance. Student college rooms will be available at the University. Special hotel and airline rates are currently being negotiated for participants. Details will be provided in the *Second Circular*.

Registration

The conference registration fee for a full participant is expected to be between 200 and 250 Singapore dollars, depending on the extent of commercial sponsorship. The registration fee will include lunch, morning and afternoon coffee on each day, the opening reception and the farewell banquet. Fees for accompanying members and students will be as low as possible.

Support for young scientists

Some assistance will be available towards the registration and accommodation costs of young scientists participating in the conference. Only students or young scientists early in their careers will be eligible for this support. Details of this assistance will be provided in the *Second Circular*.

Requests for second circular

Requests should be sent to:

AsCA '92 Conference
Crystallography Centre
University of Western Australia
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International Union of Crystallography

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Sixteenth International Congress of Crystallography, 21–29 August 1993, Beijing, China

Proposals for programme topics and categories

The XVI Congress of the International Union of Crystallography will be held in Beijing, 21–29 August 1993. The first circular will be mailed by November 1991.

It is planned to have 14 Main Lectures, between 42 and 46 Microsymposia and four General Lectures. There will be two Main Lectures, six Microsymposia and two or three Open Commission Meetings held in parallel each day, plus a poster session.

The list of categories and the list of topics for the submission of papers, within these categories, are subject to final revision and the Microsymposia topics will be included as a subset of the general list of topics. The following list sets out the proposed categories:

- 01 – Instrumentation and Experimental Techniques (X-rays, Neutrons, Electrons etc.)
- 02 – Methods of Analysis, Computing and Graphics
- 03 – Crystallography of Biological Macromolecules
- 04 – Crystallography of Biological Small Molecules
- 05 – Molecular Modelling and Design for Proteins and Drugs
- 06 – Crystallography of Organic Compounds
- 07 – Crystallography of Organometallic and Coordination Compounds
- 08 – Inorganic and Mineralogical Crystallography
- 09 – Physical and Chemical Properties of Materials in Relation to Structure
- 10 – Surfaces, Interfaces and Thin Films
- 11 – Amorphous, Imperfectly Ordered and Quasi-periodic Materials
- 12 – Defects, Microstructures and Textures
- 13 – Diffraction Physics and Optics
- 14 – Crystal Growth