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## Letter from the President

In the short history of EFOMP the year 1987 was particularly notable because of the meeting "Medical Physics '87", held at Innsbruck in September. This was the first meeting with a full day of the scientific programme devoted to contributions from members of EFOMP affiliated National Organisations. The Federation is very much obliged to the Austrian and German Societies for Medical Physics for agreeing that EFOMP join them in organising their scientific meeting. It was the promising beginning of a new dimension in co-operation between EFOMP and its affiliated National Organisations. Innsbruck was also the venue of the 1987 EFOMP Council meeting which brought together national delegates of many countries for an extensive discussion of scientific and professional matters.

The Education, Training and Professional Committee has finished the EFOMP policy statement on 'The Training of the Medical Physicist as a Qualified Expert in Radiophysics'. This has now been published and distributed. It will support our efforts to gain a comparable level of qualifications in our field, throughout Europe. Among the activities of the Scientific Committee the involvement of EFOMP in preparing for the Vth Symposium on Clinical Radiation Physics, Neubrandenburg, GDR and the joint organisation of the Second European Congress of NMR in Medicine and Biology, Berlin are to be noted.

The 1988 EFOMP Council meeting will be held in Milan, on 3rd September, and hosted by the Italian Organisation for Medical Physics. I look forward to this next opportunity for a comprehensive discussion with members of the Federation.

*H-K. Leetz.*

## Medical Physics '87

The congress "Medical Physics '87" was organised by the Austrian and German Associations for Medical Physics, with EFOMP. The venue was the Congress Centre, Innsbruck, Austria and for most the meeting began on Thursday 10th September. There was a preliminary afternoon of 'Tutorial Papers' on the previous day. The Congress Centre provided attractive and practical facilities adjacent to the old town and within easy reach of the accommodation in the city. There were about two hundred and seventy delegates.

The keynote address was given by Professor R. E. Walstam and was entitled 'Medical Physics: Past, Present and Future'. After delving deeply into the roots of our subjects Professor Walstam commented upon the present situation. In particular he commented on the achievements in setting radiation protection standards, with the work of ICRP, and upon the growing attention being given to Quality Assurance. He also commented upon the many ways in which Medical Physics services are organised in different countries and upon the place that international, regional and national organisations can play. The talk continued with a review of developments in some of the major areas of Medical Physics.

The first session was on 'Quality Control in Diagnostic Radiology'. Typically it drew contributions from several countries. After a general review there were papers on comparative studies from Austria and Sweden; then contributions on problems associated with generators and with film-screen combinations. The final paper was concerned with the safe use of mobile X-ray sets in operating theatres. After lunch there was a session on Radiotherapy Treatment Planning which included all the presentations on whole body irradiation. The afternoon concluded with four papers on Medical Optics. Two were concerned with the use of optics in gathering patient data; one dealing

with interferometric measurements on the eye, the other with moire tomography. The other two dealt with therapeutic irradiations. For some delegates the formal proceedings of the day concluded with the Congress Reception. For colleagues in the Austrian and German Societies the Annual General Meeting was scheduled to fill the evening.

The second day involved parallel sessions. Dosimetry, a core subject in the established sequence of annual meetings, attracted eleven submissions, followed by a session on Quality Assurance in Radiotherapy. Alongside these was the session on 'The impact of Chernobyl on Medical Physics'. Particular experience in monitoring was presented from Austria, East Germany, Sweden, the United Kingdom and West Germany. Apart from various studies on exposed individuals and items from the food chain our Austrian colleagues presented interesting data from different snow layers from alpine glaciers. Several papers contributed to the discussion of the particular role that medical physics departments can play in response to civil nuclear accidents. In particular a lack of preparedness to cope with an accident which itself was beyond the national jurisdiction was reported from several countries. Suggestions were made to help improve accident contingency plans for the future. The discussions on the Chernobyl incident had to be concluded to make way for the EFOMP Lecture.

Professor D. G. Gadian's EFOMP lecture was entitled 'Applications of  $^1\text{H}$  and  $^{31}\text{P}$  NMR in Biomedical Research'. The lecture gave insights into the ways in which metabolism may be studied using NMR spectroscopy. It provided a fitting start to the sequence of EFOMP Lectures which will be continued at subsequent EFOMP Scientific Meetings.

After lunch the split continued and the uneasy movement between the two halls was most apparent at this time. In one hall the papers were on Digital Image Processing and then Diagnostic Radiology. The other hall had a sequence of papers on Nuclear Magnetic Resonance. After tea a miscellaneous session ran in parallel with one on Nuclear Medicine. The evening offered an enjoyable Congress Dinner, at Igls; this was followed by Tyrolean entertainment.

On Saturday morning the conference returned to a single theme with papers first on Radiotherapy and then Brachytherapy.

Helmar Bergmann and the organising committee are to be congratulated on putting together such an interesting programme. Helmar's local colleagues dealt with administrative matters efficiently. In particular a very well prepared compilation of the Congress Proceedings was published early in 1988 (ISBN 3-925218-04-1). Enquiries about this should be addressed to:

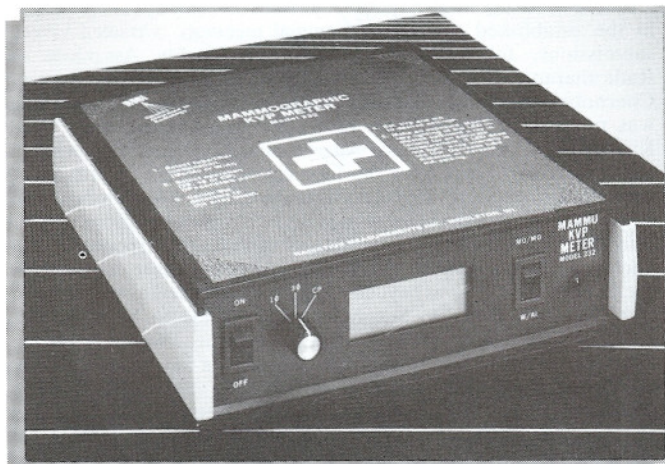
Dr. H. Bergmann  
Universitat Wien,  
Allgemeines Krankenhaus,  
Abteilung fur Nuklearmedizin an der 2 Medizinischen  
Universitatsklinik,  
A-1090 Wien.

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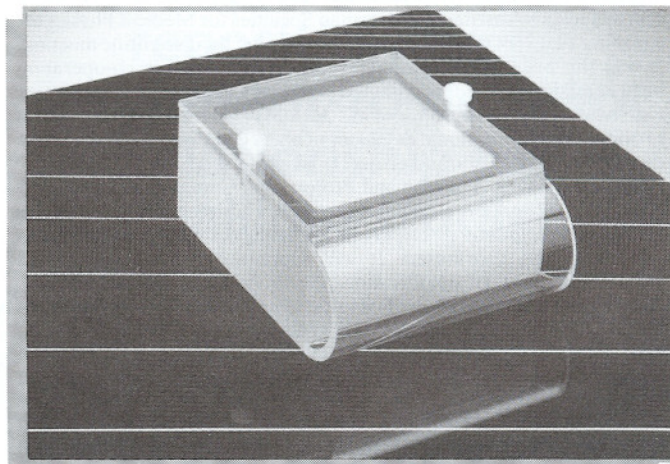
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## EFOMP Committee activity

EFOMP Council met in Innsbruck in September 1987 and the Officers met in London in February 1988. At those meetings considerable time was spent in discussing ways of increasing the activity of the Committees. Both main Committees still have difficulty in meeting, because of the need to use limited resources wisely, but both have demonstrated the improvement in performance when meetings had been held. At Officer level there continues to be correspondence seeking to fill the very few remaining gaps before all European countries are represented in EFOMP. There is dialogue continuing with organisations such as the E.A.R., ESTRO, the W.H.O. and the I.A.E.A. Recognition of Europe as a Region in the I.O.M.P. has become a reality. The I.O.M.P. is seeking to review its statutes at San Antonio, U.S.A., in September 1988, and EFOMP has had the opportunity to comment upon the proposals.

The Scientific Committee has been considering ways in which it might be restructured to achieve greater involvement from the member organisations. Also it would like to strengthen links with organisations such as the I.A.E.A. and the W.H.O., by co-option. These matters will no doubt be debated at the Milan Council and the Officers have asked the Education, Training and Professional Committee to consider using the same concepts. The Scientific Committee has planning in hand for many future meetings, including the NMR workshop in Copenhagen in 1989; participation at the Paris I.C.R. meeting in 1989; and the EFOMP 10th anniversary, in Oxford in 1990. In the longer term there are also arrangements being made for the Roentgen anniversary, at Wurtzburg in 1995, and the Becquerel anniversary, at Paris in 1996. Another aspect of the work of the Scientific Committee is illustrated by the decision to collect information about funding sources that can be used to enable scientists to visit other departments in Europe.

The Education, Training and Professional Committee hopes to build upon the foundation laid by the Policy Document 'The Training of the Medical Physicist as a Qualified Expert in Radiophysics' by arranging Summer School Training. Funds to enable this development are being sought. A survey to update information on the Medical Physics Training Programmes of Member Organisations (or nations) is being completed and already there is evidence of more formal recognition and state certification than appeared in the last review. The Committee is still concerned about the implications of the E.C. Directive on Higher Education Diplomas and intends to produce a paper about registration in relation to Medical Physics.

This is the second issue of EMP News since the last Council meeting and the Policy Document mentioned above has also been published. You will note that there is a dearth of news and of submissions from member organisations in this issue. **Will EFOMP contacts in the Member Organisations please send suitable items? Items received by the end of October will be in time for the next issue and there may even be space for them!**

## Clinical Physics and Physiological Measurement

Volume 8, Number 4, November 1987

### Papers

Indirect measurement of skin blood flow and transcutaneous oxygen tension in patients with peripheral vascular disease *K Linge, D H Roberts and G S E Dowd*

Comparison of broadband ultrasonic attenuation of the os calcis and quantitative computed tomography of the distal radius *C J Hosie, D A Smith, A D Deacon and C M Langton*

An analogue mean frequency estimator for the quantitative measurement of blood flow by Doppler ultrasound *J M Evans, J D Beard, R Skidmore and M Horrocks*

Visual evoked potentials in the older population: age and gender effects *K W Mitchell, J W Howe and S R Spencer*

Ultraviolet radiometry of clinical sources with a miniature multijunction thermopile *P J Mountford and V J Davies*

Total body potassium measurement—the effect of fallout from Chernobyl *W S Watson*

Gated thallium scintigraphy in patients with coronary artery disease: an improved planar imaging technique *W Martin, A C Tweddel, A I McGhie and I Hutton*

A comparison in neonatal piglets of model-dependent and model-independent methods for measuring glucose turnover *R Wootton, P A Flecknell and A Mehta*

### Technical notes

Combined display of video image with superimposed analogue waveforms for clinical applications *C J Griffiths*

A microvolt calibrator *I Marshall*

## Forthcoming Meetings

5th National Conference of Biomedical Physics and Engineering with International Participation.

15–17 October, 1988, Sofia, Bulgaria.

Assoc. Prof. M. Markov, Department of Biophysics, Biological Faculty, Sofia University, 8, Dragan Tzankov Blvd., Sofia 1000, BULGARIA.

20th Annual Scientific Meeting—(British Medical Ultrasound Society).

6–8 December, 1988, Glasgow, United Kingdom.

Mrs I. Blench, General Secretary, BMUS, 36 Portland Place, London, W1N 3DG, UNITED KINGDOM.

Electrical Stimulation of Muscle—(BES).

19–20 January, 1989, Hexham, United Kingdom.

Dr. R. J. Minns, Regional Medical Physics Department, Durham Unit, Dryburn Hospital, Durham, UNITED KINGDOM.

15th L. H. Gray Conference on the Radiobiology of Human Cells and Tissues.

11–15 April, 1989, Canterbury, United Kingdom.

Dr. G. G. Steel, Radiotherapy Research Unit, The Institute of Cancer Research, Clifton Avenue, Sutton, Surrey, SM2 5PX, UNITED KINGDOM.

5th Symposium on the Medical Application of Cyclotrons.

30 May–2 June, 1989, Turku, Finland.

Turku Medical Cyclotron Project, SH-Building, Room B206, University Hospital, SF-20520, Turku, FINLAND.

ESTRO Teaching Course: Computers in Radiotherapy—Selection of Equipment and Quality Control.

29–30 June, 1989, Paris, France.

ESTRO Secretariat, University Hospital St. Rafael, Department of Radiotherapy, Capucijnenvoer 35, B-3000, Leuven, BELGIUM.

Image Processing and its Applications—(IEE).

18–20 July, 1989, University of Warwick, United Kingdom.

Conference Services, IEE, Savoy Place, London, WC2R 0BL, UNITED KINGDOM.

8th Annual Meeting of ESTRO.

3–7 September, 1989, London, England.

ESTRO Secretariat, University Hospital St. Rafael, Department of Radiotherapy, Capucijnenvoer 35, B-3000, Leuven, Belgium.

Engineering for Health—(BES).

3–6 September, 1989, Bristol, United Kingdom.

Ms. J. Upton, The Royal College of Surgeons, 35/43 Lincoln's Inn Fields, London, WC2A 3PN, UNITED KINGDOM.

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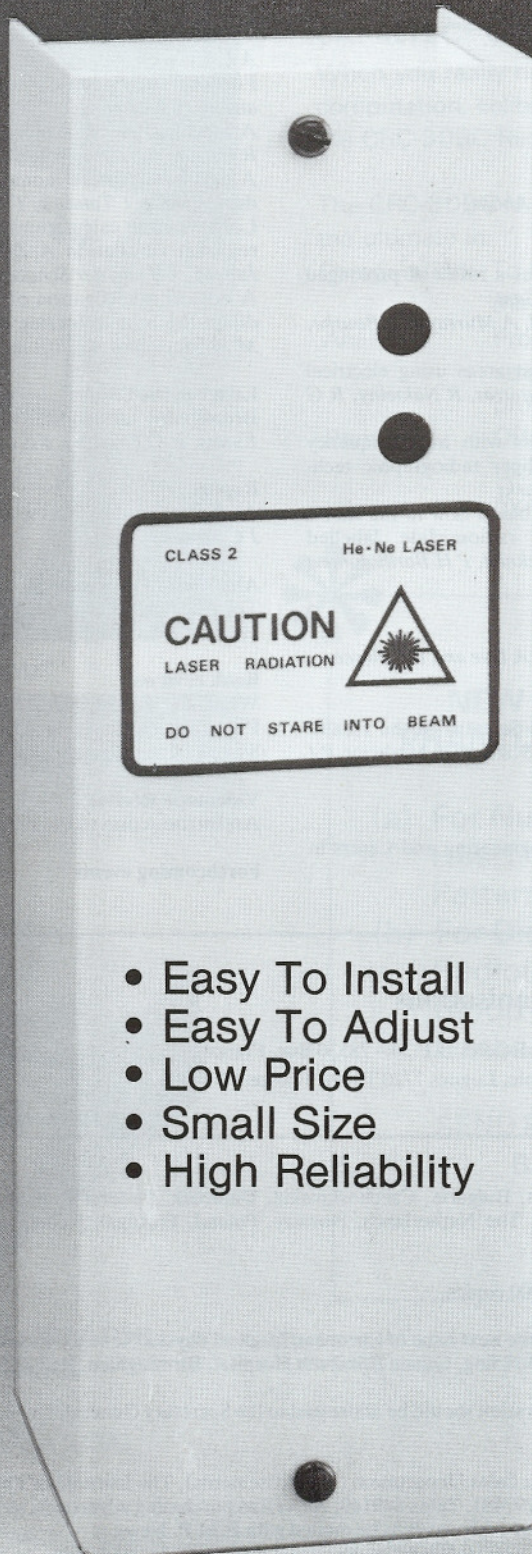
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### Bibliography

Clinical Physics and Physiological Measurement Bibliography; Diagnostic investigations of the lower urinary tract (1980-87) *Compiled by D Rowan*

### Abstract of proceedings

Current trends in neonatal monitoring

### Book reviews

Electrodiagnosis in clinical neurology. Noninvasive respiratory monitoring. Ventricular/vascular coupling. Medical laser safety. Fundamentals of clinical trials. Dictionary of medical equipment. Principles of physiological measurement. Practical guide to quality assurance in medical imaging.

### Forthcoming events

### Author index

### Volume 9, Number 1, February 1988

### Review article

Electrophysiology of the auditory system *P J Abbas*

### Papers

Changes in transcutaneous oxygen tension as a result of prolonged pressures at the sacrum *D L Bader and C A Gant*

Minimum energy for cardiac pacing *W E Hill, A Murray, J P Bourke, L Howell and R G Gold*

Determination of upper arm muscle and fat areas using electrical impedance measurements *B H Brown, T Karatzas, R Nakielny, R G Clarke*

Measurement of subcutaneous fat thickness with high frequency pulsed ultrasound: comparisons with a caliper radiographic technique *D Black, J Vora, M Hayward and R Marks*

A comparison of measurements of cerebral blood flow in the rabbit using laser Doppler spectroscopy and radionuclide labelled microspheres *J A Eyre, T J H Essex, P A Flecknell, P H Bartholomew and J I Sinclair*

### Technical Note

Precision of lead collimator construction *R E A Dye and B L Reece*

### Report

Physical Disability: the role of the Physical Scientist in the Health Service. A report of the Institute of Physical Sciences in Medicine *P J Lowe, W Richardson and R H Smallwood*

### Abstracts of proceedings

IPSM 44th Annual Conference: Clinical Engineering and Lasers in Medicine

### Book reviews

Information Technology in Health Care. In-Vivo Body Composition Studies. Progress Report on Electronics in Medicine and Biology. Fetal Physiological Measurement. Neonatal Physiological Measurement. Biosensors: Fundamentals and Applications. Physical Principles of Medical Ultrasonics. Heart Valve Engineering.

### Forthcoming events

### Volume 9, Number 2, May 1988

### Papers

Independent control of blood gas  $P_{O_2}$  and  $P_{CO_2}$  in a bubble oxygenator *K M Sutherland, D T Pearson and L S Gordon*

Haemolysis test of non-pulsatile and pulsatile impeller blood pumps *K X Qian and Q Fei*

The functional testing of external cardiac pacemakers *M P Watts and A L Evans*

Forearm arterial pressure-volume relationships in man *P Gizdulich and K H Wesseling*

A modified electrode for the electrochemical reduction of isoflurane *R G Compton, R J Northing, G W J Fleet, J C Son and B P Bashyal*

A bed temperature monitoring system for assessing body movement during sleep *T Tamura, T Togawa and M Murata*

Lung volume calculations from  $^{81}Kr^m$  SPECT for the quantification of regional ventilation *A Zwijnenburg, A Klumper, C M Roos, H M Jansen, J B van der Schoot, N van Zandwijk and H R Marcuse*

A critical investigation of the measurement of the force required to dilate the human uterine cervix *N J Kenyon, J C Stevens, P Stewart, M M Black and A Clifford*

### Letter to the Editor

Broadband ultrasonic attenuation and bone mineral density *W D Evans, E O Crawley, J E Compston, C Evans and G M Owen*

### Report

Audiology and its links with physical sciences in medicine *C Elliott and J C Stevens*

### Abstracts of proceedings

Technical aspects and trends in clinical cardiac electrophysiology and electrocardiography Osteoporosis and bone mineral measurement

### Book reviews

What is Engineering? Recent Developments in Medical and Physiological Imaging. Ultrasonic Studies of Bone. The Circulatory System. Current Advances in Sensors. An Introduction to Audiology.

### Videotape Review

An Introduction to the Hospital Use of Radiopharmaceuticals

### Forthcoming events

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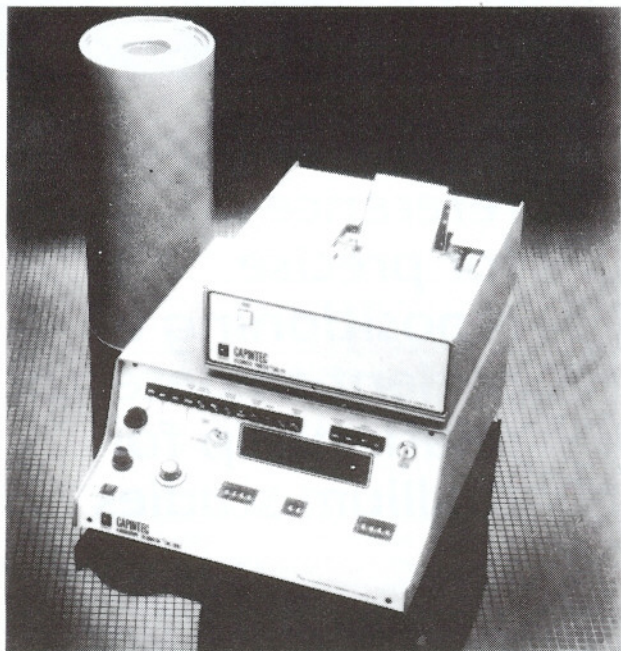
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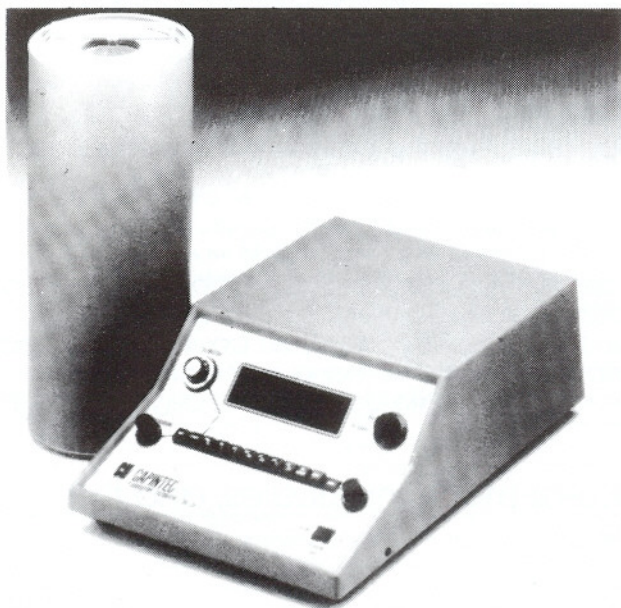
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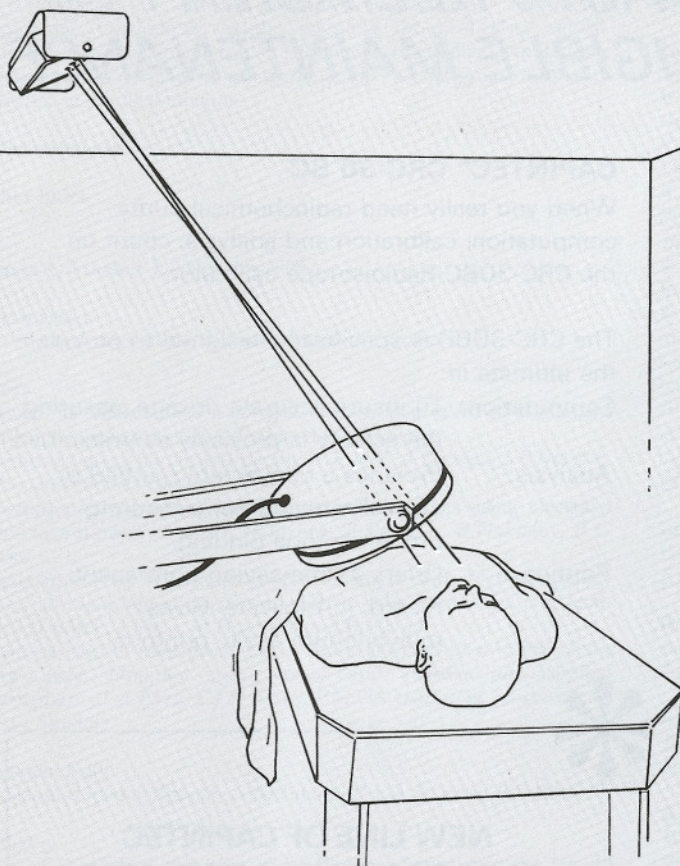
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