

## Notes for Contributors

**1.** Manuscripts should preferably be written in English, but papers in French and German will also be accepted. All manuscripts will be referred to acknowledged experts in the subject. Only those receiving favourable recommendations from the referees will be accepted for publication. Manuscripts may be sent to any Board member, any Deputy Editor or the Editor.

**2.** Typescripts should be double spaced, on one side of good grade paper, allowing a reasonable left-hand margin. An original and two copies should be submitted with the author's full postal address, position and affiliations.

**3.** A short abstract of about 80 words should precede the main text. *List of symbols:* A typewritten list of any special symbols should be submitted with the manuscript. The list should not define the symbols mathematically, but should serve to identify them typographically. The list will not appear in print, but is essential to help the typesetter and to avoid costly correction in proof.

**4.** One copy of photographs, prints or transparencies of good quality and unmarked should be submitted. Where lines or lettering are to appear on the photograph, an additional print should be supplied appropriately marked. Each should have, lightly written on the back, the author's name, the figure number and an indication of which is the top of the picture.

**5.** One copy of each line diagram should be submitted at approximately twice final size and unlettered. Diagrams must be drawn in indian ink on plain white or transparent paper. A second copy should be supplied with lettering included. The author's name and the figure number should be written on this copy. Figures should be numbered consecutively, with arabic numerals, have descriptive captions, and be mentioned in the text. The correct position for each figure should be indicated in the margin of the manuscript.

**6.** Tables should be typewritten on separate sheets. Avoid, where possible, very wide tables. Number tables

consecutively with roman numerals. Each should have a brief heading. Exceptionally lengthy tables may be summarized for publication with a note that copies of details can be obtained from the authors.

**7. Equations:** Wherever possible, mathematical equations should be typewritten, with subscripts and superscripts clearly indicated. The printer will set all mathematical symbols in italics unless otherwise indicated; symbols or letters to be set in roman (upright) type should be encircled in pencil, while bold letters should be shown by a wavy underline.

**8. References:** In the text, references are indicated by superior arabic numbers (without brackets), and should be confined to publish work that is directly pertinent. References should be listed at the end of the paper in numerical order. Authors' initials should precede their names; cited article titles should be quoted in full, enclosed in quotation marks; and abbreviations of journal names should follow the style of *Chemical Abstracts* or *Physical Abstracts*, and be underlined for italics: P.W. Anderson, "More is different" *Science* **177**, 393 (1972) C.V. Negoita, *Fuzzy Systems* (Abacus Press, Tunbridge Wells, UK, 1980)

Citations such as 'personal communication', 'unpublished work', etc., are not acceptable as numbered references but can be included in parenthesis in the text. Do not use summaries as references.

**9. Proofs:** Page proofs will be sent to authors for correction, for return within 48 hours by airmail. Correction to proofs should be restricted to printers' errors only. Authors are entitled to 25 offprints of their article free of charge. Additional offprints may be purchased if they are ordered on the form sent with the proofs.

**10.** Manuscripts, whether accepted or rejected, will not be returned to the authors.

**11.** Submission of an article will be taken to imply that it has not been previously published and that it is not on offer to any other publisher.

# ROBOTICA

Volume 6 Part 3

July–September 1988

## CONTENTS

<b>Reports and Surveys (Automation in the Home, Advanced Technology at Austin Rover, Applications for Automation, Developments in Computer Systems, Research in Robotics, Robots from Japan, Software Development for Expert Systems, Space Vehicle Manipulator, Robots Worldwide, Software Controlled Systems may Kill)</b> <b>B. H. Rudall (U.K.)</b>	<b>177</b>
<b>On-line robot trajectory control in joint coordinates by means of imposed acceleration profiles, Ir. L. Van Aken and H. Van Brussel (Belgium)</b>	<b>185</b>
<b>Trajectory control of manipulators with time varying inertia links, Guy Jumarie (Canada)</b>	<b>197</b>
<b>Three-dimensional flexural-joint stiffness analysis of flexible manipulator arms, A. Meghdari and M. Shahinpoor (USA)</b>	<b>203</b>
<b>Determination of elastodynamic errors in joints of industrial robots, Ilija Nikolic (USA and Yugoslavia)</b>	<b>213</b>
<b>A generic tool management system architecture for flexible manufacturing systems (FMS), Paul G. Ranky (U.K.)</b>	<b>221</b>
<b>Design and simulation of control systems of an inverted pendulum, Qing Feng and Kazuo Yamafuji (Japan)</b>	<b>235</b>
<b>Les apports respectifs des langages symboliques et de la cao en programmation des robots, C. Laugier (France)</b>	<b>243</b>
<b>Conference News</b>	<b>255</b>
<b>Book Reviews</b>	<b>257</b>
<b>Announcements</b>	<b>265</b>

© CAMBRIDGE UNIVERSITY PRESS 1988

Cambridge University Press

The Pitt Building, Trumpington Street, Cambridge CB2 1RP, UK

32 East 57th Street, New York, NY 10022, USA

10 Stamford Road, Oakleigh, Melbourne 3166, Australia

Printed in Northern Ireland by The Universities Press (Belfast) Ltd.