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Software Research

INTERNATIONAL SOFTWARE Quality Week Europe

Brussels, BELGIUM

9 - 13 November 1998

EURO & Y2K: The Industrial Impact

Over the past eleven years, Quality Week has firmly established itself as THE ANNUAL EVENT for software quality professionals. The foremost experts and innovators in software process design, from both academia and the industrial world, speak on software test technology, quality control, Java/Web testing, client/server technologies, test automation, managed OO integration, Y2K, and EURO Conversion. Discover how other companies solve their software quality issues!

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2nd INTERNATIONAL SOFTWARE Quality Week Europe

EURO & Y2K: The Industrial Impact

Advances in software quality technology have for years improved quality and assured faster delivery of software systems. Applied to new developments as well as to upgrades, software quality technologies have demonstrated their effectiveness. But there never has been anything quite like the twin EURO and Y2K problems now commanding so much attention in the community. Many experts view the "fix" required as simple enough -- EURO conversions and Y2K remediations are very well understood. The most imposing challenge is to insure that known technical means are well and effectively applied where and when they need to be. Every company and government agency has a real concern in providing solutions that "work" and can be delivered on time. Neither the EURO nor Y2K efforts provide for "project slip". In turn, these needs impose a big burden on software quality technology and engineering. Now is the time that the excellent results of prior decades' work has to be applied -- and the result must be good!

The 2nd INTERNATIONAL SOFTWARE QUALITY WEEK brings together over 60 presentations by industry experts and university researchers to describe and discuss the latest technologies, and to assess how they can apply to the EURO and Y2K efforts.

PROGRAM POINTS

The Pre-Conference **Tutorials** include:

- Introduction to Testing and Y2K Testing
- Making Requirements Testable
- Test Process Improvement
- Object Oriented and Model Testing Strategies
- Automating Testing

Keynote presentations give assessments of current technology, a view of government and industry efforts for Y2K and EURO, and unique perspective on the coming few years.

A special Award Ceremony for Mr. Jim Clarke, winner of the QW'98 Best Paper Award.

A special Panel Session:

The EURO Conversion -- Myth vs. Reality!

Vendor Exhibition:

- A two-day **Tools Expo** brings together leading suppliers of testing solutions.

The General Conference offers three parallel tracks of presentations:

Technology Track topics include:

- Automated Test Generation Methods
- Applications of Object Oriented Testing
- Testing Metrics
- Path/Data-Flow Testing
- Specification Testing

Tools & Solutions Track Topics include:

- Web Testing
- Testing from UML-Developed Use Cases
- Coverage Tools Surveyed
- Insurance Industry Aspects

Management Track Topics include:

- New Process Management Methods
- The True Costs of Testing
- Testing Without Requirements
- Much more...

WHO SHOULD ATTEND

- Programmers and developers who want to learn more about producing better quality code
- All quality assurance and testing specialists, beginners and experts alike, who need exposure to authoritative sources for improving software test technology
- Lead senior quality assurance managers looking for powerful maintenance and testing techniques and an opportunity to evaluate today's tools
- Maintenance technicians looking for techniques to control product degradation
- Technologists who want to catch up on the state-of-the-art in software testing, quality assurance and quality control

SPECIAL FEATURES

The QWE'98 conference provides attendees with:

- Up-to-date information on modern test and QA methodologies
- The latest in software tool technology
- Exhibitors with today's best packaged quality/test solutions
- Industrial results and effectiveness reports

MONDAY, 9 NOVEMBER, 1998

. . . . TUTORIAL DAY #1

9:00 - 12:00	A 1	Dr. Boris Beizer <i>Analysis, Inc.</i> <i>An Overview of Testing-- Unit, Integration, System Outline and Index</i>	B 1	Dr. Suzanne Robertson <i>The Atlantic Systems Guild</i> <i>Making Requirements Testable (Part I)</i>	C 1	Dr. Gualtiero Bazzana <i>ONION s.r.l.</i> <i>Testing Internet/Intranet Applications</i>	D 1	Dr. Martin Pol <i>GITEK Software N.V.</i> <i>Test Process Improvement (Part I)</i>
12:00-14:00					LUNCH AND NETWORKING			
14:00 - 17:00	A 2	Dr. Boris Beizer <i>Analysis, Inc.</i> <i>Testing & Y2K</i>	B 2	Dr. Suzanne Robertson <i>The Atlantic Systems Guild</i> <i>Making Requirements Testable (Part II)</i>	C 2	Mr. Thomas Drake <i>Coastal Research & Technology, Inc.</i> <i>Measuring Quality in Object- Oriented Software</i>	D 2	Dr. Martin Pol <i>GITEK Software N.V.</i> <i>Test Process Improvement (Part II)</i>

A1: An Overview of Testing **Dr. Boris Beizer, Analysis, Inc.** This tutorial is an overview of testing principles and technology. Newcomers to testing will learn basic concepts and vocabulary; practicing testers will acquire a new, comprehensive, conceptual structure for testing that will enable them to better understand and apply techniques and tools.

A2: Testing & Y2K **Dr. Boris Beizer, Analysis, Inc.** This is a tutorial on testing issues related to Y2K. The presentation goes through an ideal remediation process, focusing on testing and verification issues and available technology, the process that should have been used.

B1 and B2: Making Requirements Testable (full day seminar) **Dr. Suzanne Robertson, The Atlantic Systems Guild.** This one-day tutorial focuses on guiding participants through the requirements definition process. The emphasis of this exercise is on making requirements testable so that they can be negotiated, communicated and traced throughout the project. This tutorial has five main components.

C1: Testing Internet/Intranet Applications **Dr. Gualtiero Bazzana, ONION.** The tutorial consists of the following parts: -Peculiarities on Internet/Intranet projects and products; -Test approach for Internet/Intranet applications; -Testing of static WWW; -Testing of dynamic WWW; -Case Studies with analysis of ROI.

C2: Measuring Quality in Object-Oriented Software **Mr. Thomas Drake, Coastal Research & Technology, Inc.** The intent of this 1/2 day tutorial is to further one's knowledge for determining and measuring object-oriented software and to leave the audience with useful measures and techniques that are applicable for determining the essential quality of object oriented software.

D1 and D2: Test Process Improvement (full day seminar) **Dr. Martin Pol, GITEK Software N.V.** You will learn about the context of testing in the real world and software and test process improvement: -The context, why, what, when, where, who, etc. to improve? -The Test Process Improvement Model. -Application of the Model, Management of Change

TUESDAY, 10 NOVEMBER, 1998

. . . . TUTORIAL DAY #2

9:00 - 12:00	E 1	Mrs. Dorothy G. Graham <i>Grove Consultants</i> <i>Software Inspection</i>	F 1	Mr. Robert V. Binder <i>RBSC Corporation</i> <i>Modal Testing Strategies for Object-Oriented Systems (Part I)</i>	G 1	Dr. Linda Rosenberg Ted Hammer <i>GSFC NASA / Unisys</i> <i>Metrics for Quality Assurance and Risk Assessment</i>	H 1	Mr. Ed Kit <i>Software Development Technologies</i> <i>Automating Software Testing and Reviews (Part I)</i>
12:00-14:00					LUNCH AND NETWORKING			
14:00 - 17:00	E 2	Mr. Bart Broekman <i>IQUIP Informatica B.V.</i> <i>Test Automation, Eternal Struggle or Lasting Benefits?</i>	F 2	Mr. Robert V. Binder <i>RBSC Corporation</i> <i>Modal Testing Strategies for Object-Oriented Systems (Part II)</i>	G 2	Dr. John D. Musa <i>Consultant</i> <i>More Reliable, Faster, Cheaper Testing with Software Reliability Engineering</i>	H 2	Mr. Ed Kit <i>Software Development Technologies</i> <i>Automating Software Testing and Reviews (Part II)</i>

E1: Software Inspection **Mrs. Dorothy G. Graham, Grove Consultants.** Attending this tutorial will enable you be more effective and more objective in looking for potential defects in documents. You will understand how the Inspection process works, and how it can be applied to real documents. You will understand how quality issues raised by Inspection can affect your organization.

E2: Test Automation, Eternal Struggle or Lasting Benefits? **Mr. Bart Broekman, IQUIP Informatica B.V.** The tutorial provides sound theoretical principles, but is mainly practical. Real life cost/benefit examples and hard evidence of usage and results will be presented, to show what can be expected in the real world. Those experiences will be presented in such terms as: 1. Large banking application, character based. 2. Small knowledge base application in social securities, GUI.

F1 and F2: Modal Testing Strategies for Object-Oriented Systems (full day seminar) **Mr. Robert V. Binder, RBSC Corporation.** This tutorial presents new approaches for domain/state modeling to characterize class modality and shows how to produce effective test suites from these models.

G1: Metrics for Quality Assurance and Risk Assessment **Dr. Linda Rosenberg & Mr. Ted Hammer, GSFC NASA / Unisys.** This tutorial provides project managers and software developers with the knowledge to institute an affordable metrics program that will evaluate the quality of their project's products and to help them identify and track project risks.

G2: More Reliable, Faster, Cheaper Testing with Software Reliability Engineering **Dr. John D. Musa, Consultant.** This presentation will outline how you can apply Software Reliability Engineering (SRE) to testing and development to make software more reliable and to develop and test it faster and cheaper.

H1 and H2: Automating Software Testing and Reviews (full day seminar) **Mr. Ed Kit, Software Development Technologies.** In the rush to automate software testing, many people forget to pay attention to the basics, i.e., ensuring they have a valid and effective software test process and prioritizing their automation needs for greater chance of success. Edward Kit addresses these issues and concerns when he presents. There are five easy steps.

W E D N E S D A Y , 1 1 N o v e m b e r , 1 9 9 8

• • • • C O N F E R E N C E D A Y # 1 • • • •

P1	PLENARY SESSION AND KEYNOTE PRESENTATIONS #1
8:30	Conference Overview: Dr. Edward Miller, <i>Software Research Inc.</i> , QWE'98 Program Chair Dr. John D. Musa, <i>Consultant: Applying Operational Profiles to Testing + ISSRE Results Summary</i> Mr. Malcolm Levitt, <i>European Union Adviser, Barclays Bank PLC: The Impact on Firms' Global Operations</i>

Vendor Exhibition: Open 10:00 - 17:00 Refreshments

1	TECHNOLOGY	TOOLS & SOLUTIONS	PROCESS & MANAGEMENT
10:00	1T Mr. Rene Weichselbaum <i>Frequentis Nachrichtentechnik GesmbH</i> Software Test Automation	1S Mr. Manuel Gonzalez <i>Hewlett Packard</i> System Test Server Through the Web	1M Mr. Leslie A. Little <i>Aztek Engineering</i> Requirements Management - Simple Tools...Simple Processes

Refreshments

2	TECHNOLOGY	TOOLS & SOLUTIONS	PROCESS & MANAGEMENT
11:00	2T Mr. James Clarke <i>Lucent Technologies</i> Automated Test Generation From a Behavioral Model	2S Mr. Istvan Forgacs <i>Hungarian Academy of Sciences</i> Automated Test Data Generation to Solve Y2K Problems	2M Mr. Nathan Petschenik <i>Bellcore</i> Year 2000: Catalyst for Better Ongoing Testing

12-14

C O N F E R E N C E D A Y # 1 : L U N C H A N D N E T W O R K I N G

3	TECHNOLOGY	TOOLS & SOLUTIONS	PROCESS & MANAGEMENT
14:00	3T Ms. Brigid Haworth <i>Bournemouth University</i> Adequacy Criteria for Object Testing	3S Mr. Felix Silva <i>Hewlett Packard</i> Product Quality Profiling: A Practical Model to Capture the Experiences of Software Users	3M Mr. Juan Jaliff, Mr. Wolfgang Eixelberger, Mr. Arne Iversen & Mr. Roland Revesj <i>ABB</i> Making Industrial Plants Y2K-ready: Concept and Experience at ABB

Refreshments

4	TECHNOLOGY	TOOLS & SOLUTIONS	PROCESS & MANAGEMENT
15:00	4T Mr. Bill Bently & Mr. Robert V. Binder <i>mu-Research / RBSC Corporation</i> The Dynamic Information Flow Testing of Objects: When Path Testing Meets Object-Oriented Testing	4S Mr. Otto Vinter <i>Bruel & Kjaer</i> Improved Requirements Engineering Based On Defect Analysis	4M Mr. Staale Amland <i>Avenir (UK) Ltd.</i> Risk Based Testing

Refreshments

5	TECHNOLOGY	TOOLS & SOLUTIONS	PROCESS & MANAGEMENT
16:00	5T Dr. Denise Voit & Prof. David Mason <i>Ryerson Polytechnic Univ.</i> Component Independence for Software System Reliability	5S Mr. Robert J. Poston <i>AONIX</i> Making Test Cases from Use Cases Automatically	5M Mr. Graham Titterington <i>Ovum, Ltd.</i> A Comparison of the IT Implications of the Y2K and the EURO Issues

17:00
to
18:30

Cocktail Party In The Exhibit Hall

10:00
to
17:00

Vendor Technical Presentations and Product Demos

On Wednesday and Thursday, there are special vendor technical presentations and product demos. Please look for the detailed schedule in the **CONFERENCE & EXPO GUIDE**

THURSDAY, 12 November, 1998

.... CONFERENCE DAY #2

P2	PLENARY SESSION AND KEYNOTE PRESENTATIONS #2		
8:30	Session Introduction: Dr. Edward Miller, <i>Software Research, Inc.</i> , QWE'98 Program Chair Mrs. Dorothy G. Graham, <i>Grove Consultants</i> : <i>Inspection: Myths and Misconceptions</i> Mr. David Talbot, <i>European Commission</i> : <i>EU Commission Actions for Y2K and EURO</i>		

Vendor Exhibition: Open 10:00 - 17:00 Refreshments

6	TECHNOLOGY	TOOLS & SOLUTIONS	PROCESS & MANAGEMENT
10:00	6T Dr. L. Rosenberg & T. Hammer & L. Hoffman <i>GSFC NASA / Unisys</i> <i>Testing Metrics for Requirement Quality</i>	6S Mr. Avi Ziv & Dr. Shmuel Ur <i>IBM Research Lab in Haifa</i> <i>Off-The-Shelf vs. Custom Made Coverage Models, Which Is The One For You?</i>	6M Mr. L. Daniel Crowley <i>DENAB Systems</i> <i>Cost of Quality - The Bottom Line of Quality</i>

Refreshments

7	TECHNOLOGY	TOOLS & SOLUTIONS	PROCESS & MANAGEMENT
11:00	7T Mr. Hans Buwalda <i>CMG Finance BV</i> <i>Testing with Action Words, a Quality Approach to Software Automated Testing</i>	7S Mr. Howard Chorney <i>Process Software Corp.</i> <i>A Practical Approach to Using Software Metrics</i>	7M Dr. Erik P. Van Veenendaal <i>Improve Quality Services</i> <i>Questionnaire Based Usability Testing</i>

12-14

CONFERENCE DAY #2: LUNCH AND NETWORKING

8	TECHNOLOGY	TOOLS & SOLUTIONS	PROCESS & MANAGEMENT
14:00	8T Mr. Jon Huber <i>Hewlett Packard</i> <i>Software Defect Analysis: Real World Testing Implications & A Simple Model for Test Process Defect Analysis</i>	8S Mr. Lionel Briand, Mr. Bernd G. Freimut, Mr. Oliver Laitenberger, Dr. Gunther Ruhe & Ms. Brigitte Klein <i>Fraunhofer IESE/Allianz Life</i> <i>Quality Assurance Technologies for the EURO Conversion-Industrial Experience at Allianz Life Assurance</i>	8M Mr. Gorka Benguria, Ms. Luisa Escalante, Ms. ELisa Gallo, Ms. Elixabete Ostolaza & Mr. Mikel Vergasa <i>European Software Institute</i> <i>Staged Model for SPICE: How to Reduce Time to Market - TTM</i>

Refreshments

9	TECHNOLOGY	TOOLS & SOLUTIONS	PROCESS & MANAGEMENT
15:00	9T Dr. Antonia Bertolino & Ms. E. Marchetti <i>CNR-IEI</i> <i>A Simple Model to Predict How Many More Features Will Appear in Testing</i>	9S Mr. Jakob-Lyng Petersen <i>ScanRail Consult</i> <i>An Experience In Automatic Verification for Railway Interlocking Systems</i>	9M Mr. Antonio Cicu, Mr. Domenico Tappero Merlo, Mr. Francesco Bonelli, Mr. Fabrizio Conicella & Mr. Fabio Valle <i>QualityLab Consortium/MetriQs</i> <i>Managing Customer's Requirements in a SME: A Process Improvement Initiative Using a IT-Based Methodology and Tool</i>

Refreshments

10	TECHNOLOGY	TOOLS & SOLUTIONS	SPECIAL PANEL SESSION
16:00	10T Mr. Stacy J. Prowell <i>Q-Labs, Inc.</i> <i>Impact of Sequence-Based Specification on Statistical Software Testing</i>	10S Mr. Tom Gilb <i>Result Planning Limited</i> <i>Risk Management Technology: A Rich Practical ToolKit for identifying, documenting, analyzing and coping with project risks</i>	10M Mr. Thomas Drake <i>Coastal Research & Technology, Inc.</i> <i>The Euro Conversion - Myth versus Reality!</i>

Special Panel Session Chaired by Thomas Drake

Panelists: John Corden, *Cyrano*; Patrick O'Beirne, *Consultant*; Jens Pas, *ps_testware*; Graham Titterington, *Ovum*

FRIDAY, 13 NOVEMBER, 1998

..... CONFERENCE DAY #3

11	TECHNOLOGY	TOOLS & SOLUTIONS	PROCESS & MANAGEMENT
8:30	11T Dr. Matthias Grochtmann & Mr. Joachim Wegener <i>Daimler-Benz AG</i> <i>Evolutionary Testing of Temporal Correctness</i>	11S Mr Michael Rettelbach, Dr.Peter Liggesmeyer & Mr. Michael Greiner <i>Siemens AG</i> <i>Prediction of Project Quality by Applying Stochastical Techniques to Metrics Based on Accounting Data: An Industrial Case Study</i>	11M Mr. Mark Buenen <i>GITek Software n.v.</i> <i>Introducing Structured Testing in a Dynamic, Low-Mature Organization</i>

Refreshments

12	TECHNOLOGY	TOOLS & SOLUTIONS	PROCESS & MANAGEMENT
10:00	12T Ms. Martina Marre, Ms. Monica Bobrowski & Mr. Daniel Yankelevich <i>Universidad de Buenos Aires</i> <i>A Software Engineering View of Data Quality</i>	12S Mr. John Corden <i>CYRANO</i> <i>Year 2000 - Hidden Dangers</i>	12M Ms. Elisa Gallo, Mr. Pablo Ferrer, Mr. Mikel Vergasa & Mr. Chema Saris <i>European Software Institute</i> <i>SW CMM Level2: The Hidden Structure</i>

P3	PLENARY SESSION AND KEYNOTE PRESENTATIONS #3		
11:00	Dr. Boris Beizer, <i>Analysis, Inc.: Nostradamus Redux</i> Conference Conclusion: Dr. Edward Miller, <i>Software Research, Inc.</i> , QWE'98 Program Chair		

EXTRA PRESENTATIONS		TWO-DAY VENDOR EXHIBIT
Wednesday and Thursday, 11-12 Nov. 98		Wednesday and Thursday, 11-12 Nov. 98
1	Mr. Bogdan Bereza-Jarocinski, <i>ENEA Data AB</i> <i>Is Software Testing Scientific?</i>	Products and services that support software testing techniques, quality methodology, and Y2K services and applications will be displayed Wednesday and Thursday, in the foyer of the Sheraton Rogier. Gain a competitive edge and do all your product investigation at one time. You can see live demonstrations of the products that will dominate the next decade! Exhibitors include: Aonix, Blackstone & Cullen, Cyrano, E2S, McCabe, Mercury, OM Partners, SIMGroup, Software Research, IQUIP, GITEK Software and many more. Note: Please look at the Schedule for the VENDOR TECHNICAL PRESENTATIONS in the CONFERENCE & EXPO GUIDE
2	Mr. Patrick O'Beirne, <i>Systems Modelling Ltd.</i> <i>Managing Risk in EURO Currency Conversion</i>	
3	Mr Jens Pas, Ms. Ethel Verbiest, Mr. Wim Blommaert & Mr. Steven Patry, <i>ps_testware</i> <i>Testing the Year 2000</i>	
<p>Visit The Tools Exposition</p> <p>Wednesday, 11/11 -- 10:00 to 18:00</p> <p>Thursday, 12/11 -- 10:00 to 17:00</p> <p>Cocktail Party, 17:00 to 18:00 on Wednesday</p>		

Quality Week Europe presents a very strong international team of speakers. To learn more about the speakers and their topics, visit our web site at: <http://www.soft.com/QualWeek/QWE98/qwe98.program.html>
Once there, click on the Speaker's Name to see his/her photo and biography.
Click on the Presentation Title for a description of the paper's content.

INTERNATIONAL ADVISORY BOARD

Special thanks to the International Advisory Board, composed of international academics, industrialists, and consultants, for its crucial support in creating a broad-based, high quality technical event.

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| Dr. Boris Beizer, <i>Analysis</i> , USA | Mr. Dirk Craeynest, <i>OFFIS nv</i> , Belgium | Dr. Martin Pol, <i>GITEK</i> , Belgium |
| Mr. William Bently, <i>mu_Research</i> , USA | Mr. Tom Drake, <i>CRTI</i> , USA | Dr. Suzane Robertson, <i>Atlantic Systems Guild</i> , UK. |
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| Mr. Adrian Burr, <i>tMSc</i> , England | Dr. Peter Liggesmeyer, <i>Siemens</i> , Germany | Dr. Otto Vinter, <i>Bruel & Kjaer</i> , Denmark |
| Mr. Gunther Chrobok, <i>Siemens</i> , Germany | Dr. Edward Miller, <i>Software Research</i> , USA | Dr. Tony Wasserman, <i>Software Methods & Tools</i> , USA |
| Ms. Ann Combelles, <i>Objectif</i> , France | Prof. Leon Osterweil, <i>U. of Massachu.</i> , USA | |

..... KEY SPEAKER LIST

Gaultiero Bazzana is a Partner and Managing Director of **ONION s.r.l.**, an Italian SME specialized in the fields of sw communications, technologies, consulting. Dr. Bazzana has matured significant technical experiences especially in the telecommunications domain in CIM and in networking, including Internet/ Intranet/Extranet services and solutions. His research activity spanned in various fields of software engineering, ranging from Petri Nets to development methodologies, functional and structural test coverage, metrics and related tools. He has acted as Project Leader of several European Projects within the ESPRIT initiative.

Boris Beizer is best known for his books on software testing and his seminars based on them: *Software Testing Techniques*, *Software System Testing and Quality Assurance* and *Black Box Testing*. Dr. Beizer has been in the computer industry for more than 30 years, and has been a speaker at many testing conferences. He consults on software testing and quality assurance with many organizations throughout the world and he is currently an independent consultant with **ANALYSIS, Inc.**

Robert Binder is President of **RBSC Corp.**, providing consulting and training in software engineering and software process improvement since 1984. Mr. Binder has written extensively about software development, including *Application Debugging* and his forthcoming *Testing Object-Oriented Systems*. He writes a regular column on testing for "Object" magazine. He developed the FREE methodology for testing object-oriented systems.

Bart Broekman started his career in IT at Philips Telecommunications & Data Systems, where he gained experience in programming, testing and quality assurance. He joined the software company **IQUIP Informatica B.V.** where he fulfilled assignments ranging from test consultancy to organizing and managing large test projects. He aided in developing the structured test approach TMap, a de facto standard in the Benelux, and has implemented this in numerous organizations which have profited from his more than 13 years of testing experience.

Thomas Drake is a management and technology consultant with **Coastal Research & Technology**. He is currently on assignment with the National Security Agency working as a senior technologist in their Software Engineering Applied Technology Center. He manages this Center's Software Quality

Engineering initiatives. As part of an industry and government outreach/ partnership program, he holds frequent seminars and tutorials covering code analysis, coding practice, testing, software project management, and best current practices in software development.

Dorothy Graham is the founder of **Grove Consultants**, which provides consultancy, training and inspiration in software testing, test automation and inspection. She is co-author with Tom Gilb of the book *Software Inspection*, published by Addison Wesley in 1993. She and her partner Mark Fewster are currently writing a book on automating Software Testing, to be published by Addison Wesley Longman in 1998. Mrs. Graham was programme chair for the first European software testing conference, and has been involved in many conferences and seminars in testing and quality.

Ed Kit is the founder and President of **Software Development Technologies**, has assisted hundreds of companies to improve their software testing and automation practices. His recent book, *Software Testing in the Real World... Improving the Process*, has been adopted as the standard by leading software and commercial companies.

Malcolm Levitt is the EU Adviser to the Directors of **Barclays Bank PLC**. He has worked on EMU since 1989 when, as a Partner in a large consultancy firm, he supervised a pan-European study of how a single currency could be introduced if the political will existed. The Report, "A Strategy for the EMU", has been published in several languages. He also advised overseas companies, especially in the electronics sector, on investment in the UK.

Edward Miller is President of **Software Research, Inc.**, San Francisco, California. Dr. Miller pioneered the development of automated software testing methodologies and analysis support tools. He has established himself as a highly-respected leader in the field. He is the author of *Software Testing and Validation Techniques*, an IEEE Computer Society Press tutorial text, as well as numerous articles on software testing.

John D. Musa is an independent consultant. The courses he gives around the world and his pioneering book, *Software Reliability: Measurement, Prediction and Application*, have gained him recognition as one of the creators and leaders in the field. He organized and led the transfer of software reliability

engineering into practice within AT&T, spearheading the effort that defined it as a "best current practice." Actively involved in research to advance the theory and practice of the field.

Martin Pol, with more than 25 years in the information business, has worked at **IQUIP Informatica** since 1991, within the dedicated testing unit TMap(tm) Consultancy with more than 250 specialized testers. With exceptional insight and experience in practical testing issues, Dr. Pol is a highly regarded presenter at conferences and training sessions throughout Europe and in the USA. He was involved in the development of the structured testing approach TMap(tm). He's also the co-author of two (Dutch) books on TMap(tm).

Suzanne Robertson is a teacher and consultant specializing in modeling techniques for system development. She has co-authored courses on system analysis and software design for both procedural and object-oriented systems, requirements engineering, quality assessment and problem solving. Suzanne is currently developing techniques for identifying and reusing requirements patterns. She specializes in helping companies to adapt modern software development techniques to fit specific projects. She is a member of the IEEE and is roving ambassador for the British computer Society's Reuse Group.

Linda Rosenberg is an Engineering Section Head at **Unisys Government Systems** in Lanham, MD USA. She is contracted to manage the Software Assurance Technology Center through the System Reliability and Safety Office in the Flight Assurance Division at Space Flight Center, NASA. Dr. Rosenberg is responsible for overseeing metric programs as basis for numerical guidelines and standards for software developed at NASA.

David Talbot has been with the **European Commission** since 1989 where he is responsible for ESPRIT's activities in the area of Software Technologies. ESPRIT is the Information Technology R&D programme of the European Union. Prior to joining the Commission he has spent the whole of his working life in the Computer Business. He has worked on a variety of early computer systems; held management appointments covering technical, business and marketing activities and for four years worked on secondment to the UK Department of Trade and Industry as the first Director of Software Engineering in the UK Alvey programme. He has a degree in Mathematics from Oxford University.

. . . . REGISTRATION FOR QUALITY WEEK

REGISTRATION: Please complete this form and send it to Software Research Institute, 625 Third Street, San Francisco, CA 94107-1997, USA with your check, or FAX this form with your payment details. **FAX to +1 (415) 957-0730.** You can also **register on the Web:** <http://www.soft.com>, or **by email:** qw@soft.com.

You can pay by **credit card** (Visa, Mastercard, American Express), **by check**, or by **bank wire transfer**. Please handle the credit card payments by FAX or over the phone.; do not E-Mail credit card information. The entire conference fee is payable prior to the program. **Make checks payable to SR Institute.** No cancellation fee is applicable until 30 October 1998; \$250 thereafter. No refunds will be given for cancellations after 30 October. Call the registrar to obtain your cancellation number. **Substitutions** are permitted with written notification until 30 October.

FEES: Registration includes all seminar and conference material, Continental Breakfast, Lunches, Refreshments, and Cocktail Parties.

Registered & Paid	Before 15 October	After 15 October	Group Rates
Tutorial Day #1	US\$450 (16.650 BEF)	US\$500 (18.500 BEF)	no discount
Tutorial Day #2	US\$450 (16.650 BEF)	US\$500 (18.500 BEF)	no discount
Both tutorial days	US\$850 (31.450 BEF)	US\$950 (35.150 BEF)	no discount
1-Day Tutorial + Conference	US\$1450 (53.650 BEF)	US\$1550 (57.350 BEF)	10% discount
Conference + Tools Exhibition	US\$1150 (42.550 BEF)	US\$1250 (46.250 BEF)	10% discount
5-Day Quality Week Event COMBINED	US\$1650 (61.050 BEF)	US\$1850 (68.450 BEF)	10% discount

NOTE: A **check, credit card, or bank transfer** payment must be received at The SR Institute by **15 October** to benefit from the lower rates.

SAVE: Benefit from the reduced group rate! Send your **team** of software QA specialists, managers and developers. If you register two or more representatives at one time, deduct 10% of the fee for each attendee from the Conference or COMBINED (Conference + Tutorial) prices only.

CONFERENCE HOTEL: Quality Week will be held at the luxurious Sheraton Brussels Hotel, 3 Place Rogier, B-1210 Brussels. Within easy walking distance of the best in facilities, restaurants, clubs, theaters, shops, and points of interest.

Please Type or Print:

Name: _____
 Title: _____
 Company: _____
 Street: _____
 City/State/ZIP: _____
 Phone: () _____
 FAX: () _____
 E-mail: _____

Primary Job Function: Tester SQA Engineer Analyst
 Developer Project Lead User QA Manager
 Other _____
 Topic of interest _____

Please check one:

- Tutorial Day 1 Tutorial Day 2 Both Tutorial Days
 3-Day Conference + Tools Exhibition
 1-Day Tutorial + 3-Day Conference + Tools Exhibition
 2-Day Tutorials and Conference COMBINED

Please choose morning and afternoon tutorials for each day attended:

- Day1-AM: A1 B1 C1 D1
 Day1-PM: A2 B2 C1 D2
 Day2-AM: E1 F1 G1 H1
 Day2-PM: E2 F2 G2 H2

- Member ACM Member SAI Member ASQ ISRRE

Check enclosed for US\$ _____
 Visa/MC # _____ Exp. _____
 AmExp # _____ Exp. _____
 Name on card _____
 Signature _____

- Bank Wire Transfer (see details below)

Register now by:

FAX: +1 (415) 957-0730 E-mail: qw@soft.com
 Voice: +1 (415) 957-1441 Web: <http://www.soft.com>

Bank Transfer Registration: Please send the entire required amount by wire transfer to either of these two accounts; customer pays wire fees:
Wells Fargo Bank, 490 Brannan Street, San Francisco, CA 94107, USA, ABA#121-000-248, FBO Account #0052-078-029, Software Research Institute, SWIFT Code: WFBUIUS6S

Kredietbank nv, Geldenaaksebaan 149, B-3001 Heverlee, Belgium: Account #422-0037759-88, Quality Week Account, SWIFT Code: KREDBEBB. Please be sure to include the required 21% VAT (Value Added Tax) in addition to the registration amount if you are using this account.

Credit Card Registration: For credit card registration, complete the form and then FAX the QWE'98 Registrar with your credit card information. Please do not include credit card information in Email.

IMPORTANT NOTE: If you register for QWE'98 on the Web and you do NOT hear from us within 3 business days, please send Email to qw@soft.com.

HOTEL ACCOMODATIONS

Please make your own reservations. November tends to be a busy month, so book early. Rooms are being held at special conference rates until **9 October**. **The conference hotel is the The Sheraton Brussels, 3 Place Rogier, B-1210 Brussels.**

HOTEL (Rates per night)	SINGLE	DOUBLE/TWIN	PHONE	FAX
Sheraton Hotel ****	6.600BEF	7.200BEF	+32(2)224-3111	+32(2)224-3456
Crowne Plaza Brussels *****	4.500BEF	5.000BEF	+32(2)203-6200	+32(2)203-4392
Metropole ****	5.950BEF	6.950BEF	+32(2)217-6450	+32(2)218-0240
Grand Hotel Mercur ****	4.500BEF	5.150BEF	+32(2)220-6611	+32(2)217-8444
Le Dome ***	3.500BEF	4.000BEF	+32(2)218-0680	+32(2)218-4112
Le Vendome **	2.850BEF	3.450BEF	+32(2)227-0300	+32(2)218-0683

For more information about the hotels, please visit the Quality Week Web Page at <http://www.soft.com/QualWeek/QWE98/> (click on "Hotels"). **Prices per night include tax, services, and buffet breakfast, except at the Crowne Plaza where breakfast is extra.**