

# COLING BUDAPEST

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of the

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Computer and Automation Institute  
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Pisa (1973), Ottawa (1976), Bergen (1978), Tokyo (1980),  
Prague (1982), Stanford (1984), Bonn (1986)

## OPENING ADDRESS

It is my distinct pleasure to welcome all the contributors and participants of the 12th International Conference on Computational Linguistics here in Budapest. On behalf of our scientific community I would like to express our thanks to the International Committee on Computational Linguistics that after 17 years the COLING conference returned to Hungary again. Quite a few of you attended COLING'71 held in our country in 1971 under the pseudo-name CLIDE'71 that is Computational Linguistics In Debrecen. Most of you have come to us first time.

The application of computers to linguistics is one of the great challenges which we face. The importance of any progress in your field is well understood by the scientific communities. We all realize that the progress in computing catalized the convergence of three previously disparate areas: the theory of axiomatic reasoning, the study of mechanical computation, and the psychology of intelligence, i.e. the languages.

Since the publication of Gödel's famous paper in 1931 "On Formally Undecidable Propositions", the fundamental limits of our digital computers are also known. There are inherent undecidabilities in our formal languages, i.e. in our computers, independently of their size, speed or architecture. The two sentences "The following sentence is false" and "The preceding sentence is true" taken together have the same effect as the old Greek Epimenides-paradox about the Cretans.

Yes, we do know our limits. Still, we witnessed a fantastic progress of the application of computers to natural language processing. You have already climbed high mountains. Your computers can indeed give appropriate responses to spoken languages in many special cases. Your systems play important role in the compilation of modern encyclopaediae, vocabularies, data bases, and new information systems.

The founding fathers of the Hungarian Academy of Sciences were fully aware of the fundamental importance of linguistics, thus we have an old but flourishing tradition of it. Mathematical schools in Hungary have deep traditions as well. Computational linguistics is a child - a son or a daughter, I don't know - of the marriage of linguistics and a special branch of mathematics. We are proud of the heritage of John von Neumann, Lipót Fejér, Frigyes Riesz, George Pólya, László Kalmár, and others, and we do hope that their "children" will be able to contribute to the progress of their field as the parents did.

In Hungary the west-part and the east-part are divided by the river Danube. In the last century the true founder of the Hungarian Academy of Sciences put a lot of effort into the building of a bridge, the Chain-Bridge, to connect, to bring closer to each other our East and West.

I do hope that COLING'88 in Budapest will serve as a bridge between experts of computational linguistics of West and East, North and South. I wish you a very successful meeting, deep and fruitful discussions. Have a nice time in Budapest.



Iván T. Berend

President of the Hungarian Academy of Sciences



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## INTRODUCTION

The biennial COLING conferences grow in their scope of coverage and in the number of paper submissions: this year, the reviewers faced a difficult task to evaluate 461 abstracts submitted by authors from 29 countries all over the world and to select 137 full papers and about 40 reserve papers to be published in the present volume. The selection had to be very strict; every abstract was reviewed by three referees and the final decision was made according to their assessments. Our intention was, on the one hand, not to organize too many parallel sessions (even four may seem too much, I am afraid), and, on the other, to give the opportunity to as many contributors as possible to present their results, at least in the form of an abstract published in the Proceedings. This led us to introduce (for the first time at COLING) the category of 'reserve' or 'alternate' papers, i.e. papers that were accepted for publication but will be presented only in case of some 'slot' in the programme. We hope that this arrangement will also stimulate broad discussions in the 'corridors', where the authors of the reserve papers can get a response to their written contributions.

I would like to extend my thanks to all the reviewers for the hard job, especially to those who made the efforts and formulated critical comments to the abstracts they had read, which helped the authors to understand the decisions, and, as the case may be, to improve the final versions. My special thanks go to the five advisors - Professors Aravind Joshi, Hans Karlgren, Makoto Nagao, Petr Sgall and Wolfgang Wahlster, who undertook a painful task to read all the abstracts thematically belonging to their domain of interest and to recommend which papers were to be accepted from a broader perspective; their recommendations helped me a lot, especially when the assessments of the other reviewers were not unanimous.

Last but not least, I would like to thank all those who submitted their abstracts for COLING 88 and thus showed an interest in our meetings; I do hope that those whose abstracts could not be included in this volume will overcome their disappointment and will not be discouraged to show their interest again at COLING 1990!

Eva Hajičová  
Programme Chairperson

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# Table of Contents

N.ABE	Feasible learnability of formal grammars and the theory of natural language acquisition.....	1
A.ABEILLE	Parsing French with Tree Adjoining Grammar: some linguistic accounts.....	7
L.AHRENBURG	Functional constraints in knowledge-based natural language understanding.....	13
J.A.ALONSO	A model for transfer control in the METAL MT-system.....	19
I.BÁTORI and S.MAROK	Efficiency considerations for LFG-parsers - incremental and table-lookup techniques.....	25
J.BEAR	Morphology and two-level rules and negative rule features.....	28
J.L.BEAVEN and P.WHITELock	Machine translation using isomorphic UCGs.....	32
A.BECH and A.NYGAARD	The E-framework: a formalism for natural language processing.....	36
C.BEIERLE and U.PLETAT	Feature graphs and abstract data types: a unifying approach.....	40
A.BÉMOVÁ, K.OLIVA and J.PANEVOVÁ	Some problems of machine translation between closely related languages.....	46
W.BLOEMBERG and M.KESSELHEIM	A system for creating and manipulating generalized wordclass transition matrices from large labelled text-corpora.....	49
B.BOGURAEV, J.CARROLL, E.BRISCOE, C.GROVER	Software support for practical grammar development.....	54
Ch.BOITET and Y.ZAHARIN	Representation trees and string-tree correspondences.....	59
I.A.BOLSHAKOV	Co-ordinative ellipsis in Russian texts: problem of description and restoration.....	65
E.BORISSOVA	Two-component teaching system that understands and correct mistakes.....	68
P.BROWN, J.COCKE, S.DELLA PIETRA, V.DELLA PIETRA, F.JELÍNEK, R.MERCER and P.ROOSSIN	A statistical approach to language translation.....	71
S.BUSEMANN and C.HAUENSCHILD	A constructive view of GPSG or how to make it work.....	77
J.CALDER, E.KLEIN and H.ZEEVAT	Unification Categorical Grammar: a concise, extendable grammar for natural language processing.....	83
N.CALZOLARI and E.PICCHI	Acquisition of semantic information from an on-line dictionary.....	87
W.N.CAMPBELL	Speech-rate variation and the prediction of duration.....	93
J.G.CARBONELL and R.D.BROWN	Anaphora resolution: a multi-strategy approach.....	96
L.CARLSON	RUG: Regular Unification Grammar.....	102
J.CARSON	Unification and transduction in computational phonology.....	106
H.H.CHEN, I-P.LIN and C.-P.WU	A new design of Prolog-based bottom-up parsing system with government-binding theory.....	112
Z.CHEN and Q.GAO	English-Chinese machine translation system IMT/EC.....	117
N.CORREA	A binding rule for government-binding parsing.....	123
N.CURTEANU	Augmented X'-schemes.....	130
W.DAELEMANS	GRAFON: a grapheme-to-phoneme conversion system for Dutch.....	133

L.DANLOS and F.NAMER	
Morphology and cross dependencies in the synthesis of personal pronouns in Romance languages.....	139
M.DEVOS, G.ADRIAENS and Y.D.WILLEMS	
The Parallel Expert Parser (PEP): a thoroughly revised descendent of the Word Expert Parser (WEP).....	142
Ch.DiMARCO and G.HIRST	
Stylistic grammars in language translation.....	148
M.DOMENIG	
Word Manager: a system for the definition, access and maintenance of lexical databases.....	154
K.EBERLE	
Partial ordering and Aktionsarten in discourse representation theory.....	160
L.EMIRKIAN and L.H.BOUCHARD	
Knowledge integration in a robust and efficient morpho-syntactic analyser for French.....	166
K.-J.ENGELBERG	
Lexical Functional Grammar in speech recognition.....	172
D.FASS	
Metonymy and metaphor: what's the difference.....	177
P.-J.GAILLY	
Expressing quantifier scope in French generation.....	182
M.GASSER and M.G.DYER	
Sequencing in a connectionist model of language processing.....	185
M.GERLACH and M.SPRENGER	
Semantic interpretation of pragmatic clues: connectives, modal verbs, and indirect speech acts.....	191
E.P.GIACHIN and C.RULLENT	
Robust parsing of severely corrupted spoken utterances.....	196
D.GIBBON and G.BRAUN	
The psi/phi architecture for prosodic parsing.....	202
I.GOLAN, S.LAPPIN and M.RIMON	
An active bilingual lexicon for machine translation.....	205
G.GÖRZ and D.PAULUS	
A finite state approach to German verb morphology.....	212
J.GUNDEL, N.HEDBERG and R.ZACHARSKI	
On the generation and interpretation of demonstrative expressions.....	216
J.HAJIĆ	
Formal morphology.....	222
J.HARRINGTON, G.WATSON and M.COOPER	
Word boundary identification from phoneme sequence constraints in automatic continuous speech recognition.....	225
K.HASIDA	
A cognitive account of unbounded dependency.....	231
H.HAUGENEDER and M.GEHRKE	
Improving search strategies: an experiment in best-first parsing.....	237
P.HELLWIG	
Chart parsing according to the slot and filler principle.....	242
M.HESS	
Crossing coreference in discourse representation theory.....	245
J.Ph.HOEPELMAN and A.J.M. van HOOF	
The success of failure - the concept of failure in dialogue logics and its relevance for natural language semantics.....	250
D.HORTON and G.HIRST	
Presuppositions as beliefs.....	255
P.ISABELLE, M.DYMETMAN and E.MACKLOVITCH	
CRITTER: a translation system for agricultural market reports.....	261
P.S.JACOBS	
Achieving bidirectionality.....	267
P.S.JACOBS	
Concretion: assumption-based understanding.....	270
H.JÄPPINEN, E.LASSILA and A.LEHTOLA	
Locally governed trees and dependency parsing.....	275
D.JURAFSKY	
Issues in Relating Syntax Semantics.....	278
M.B.KAC and T.C.RINDFLESCH	
Coordination in reconnaissance-attack parsing.....	285

K.KAKIGAHARA and T.AIZAWA Completion of Japanese sentences by inferring function words from content words.....	291
R.M.KAPLAN and J.T.MAXWELL III An algorithm for functional uncertainty.....	297
R.M.KAPLAN and J.T.MAXWELL III Constituent coordination in LFG.....	303
H.KARLGRÉN and J.KUNZE Vocnets - a tool for handling finite vocabularies.....	306
R.T.KASPER An experimental parser for systemic grammars.....	309
L.KATAJA and K.KOSKENNIEMI Finite-state description of Semitic morphology: a case study of ancient Accadian.....	313
B.KATZ and B.LEVIN Exploiting lexical regularities in designing natural language systems.....	316
J.KILBURY Parsing with category cooccurrence restrictions.....	324
Z.KIRSCHNER Traditional means in machine translation.....	328
M.KOIT Constructing a model of dialog.....	332
K.KOSKENNIEMI and K.W.CHURCH Complexity, two-level morphology and Finnish.....	335
I.KUDO, H.KOSHINO, M.CHUNG and T.MORIMOTO Schema method: a framework for correcting grammatically ill-formed input.....	341
R.KUHN Speech recognition and the frequency of recently used words: a modified Markov model for natural language.....	348
R.J.KUHNS A news analysis system.....	351
J.KUNZE Instantiations and (obligatory vs. optional) actants.....	356
J.-M.LANCEL, M.OTANI, N.SIMONIN and L.DANLOS SAGE: a sentence parsing and generation system.....	359
B.LANG Parsing incomplete sentences.....	365
M.V.LaPOLLÀ On the role of old information in generating readable text: a psychological and computational definition of 'old' and 'new' information in the NOSVO system.....	372
L.LESMO and P.TERENZIANI Interpretation of noun phrases in intensional contexts.....	378
D.P.LONG and R.GARIGLIANO Inheritance in hierarchical relational structures.....	384
B.MAEGAARD Designing and testing linguistic development phases.....	387
M.MARINO A process-activation based parsing algorithm for the development of natural language grammars.....	390
J.H.MARTIN Representing regularities in the metaphoric lexicon.....	396
S.MATSUNAGA and M.KOHDA Linguistic processing using a dependency structure grammar for speech recognition and understanding.....	402
I.MAX A new formal tool: functorial variables representing assertions and presuppositions.....	408
A.K.MELBY Lexical transfer: between a source rock and a hard target.....	411
W.MENZEL Error diagnosing and selection in a training system for second language learning.....	414
R.E.MERCER Solving some persistent presupposition problems.....	420
M.MERKEL A novel analysis of temporal frame-adverbials.....	426
M.METEER and V.SHAKED Strategies for effective paraphrasing.....	431

M.MEYA and J.VIDAL	
An integrated model for the treatment of time in machine translation systems.....	437
E.van MUNSTER	
The treatment of scope and negation in Rosetta.....	442
M.NAGAO panel moderator	
Language engineering: the real bottle-neck of natural language processing.....	448
Panelists:	
K.JENSEN	
Why computational grammarians can be skeptical about existing linguistic theories.....	448
D.ROESNER	
Why implementors of practical NLP systems can not wait for linguistic theories.....	450
E.HAJIČOVÁ	
Why we use dependency grammar.....	451
J.TSUJII	
Reasons why I do not care grammar formalism.....	452
M.TOMITA	
"Linguistic" sentences and "real" sentences.....	453
H.NAKAGAWA and T.MORI	
A parser based on connectionist model.....	454
J.NAKAMURA and M.NAGAO	
Extraction of semantic information from an ordinary English dictionary and its evaluation	459
A.NAKHIMOVSKY and W.J.RAPAPORT	
Discontinuities in narratives.....	465
S.NIRENBURG and I.NIRENBURG	
A framework for lexical selection in natural language generation.....	471
F.NISHIDA, S.TAKAMATSU, T.TANI and T.DOI	
Feedback of correcting information in postediting to a machine translation system.....	476
T.NISHIDA, X.LIU, S.DOSHITA and A.YAMADA	
Maintaining consistency and plausibility in integrated natural language understanding....	482
H.NOGAMI, Y.YOSHIMURA and S.AMANO	
Parsing with look-ahead in real-time on-line translation system.....	488
K.OLIVA	
Syntactic functions in GPSG.....	494
K.OLIVA and M.PLÁTEK	
List automata with syntactically structured output.....	498
E.V.PADUCHEVA	
Referential properties of generic terms denoting things and situations.....	501
V.PERICLIEV, S.BRAJNOV and I.NENOVA	
Hinting by paraphrasing in an instruction system.....	507
V.PETKEVIČ	
New dependency based specification of underlying representations of sentences.....	512
V.PIGNATARO	
A computational approach to topic and focus in a production model.....	515
J.PUSTEJOVSKY and P.G.ANICK	
On the semantic interpretation of nominals.....	518
M.RAYNER, A.HUGOSSON and G.HAGERT	
Using a logic grammar to learn a lexicon.....	524
W.READ, A.QUILICI, J.REEVES, M.DYER and E.BAKER	
Evaluating natural language systems: a sourcebook approach.....	530
M.REAPE and H.THOMPSON	
Parallel intersection and serial composition of finite state transducers.....	535
R.REILLY, G.FERRARI and I.PRODANOF	
Framework for a model of dialogue.....	540
P.C.ROLF	
Machine translation: the languages network (versus the intermediate language).....	544
K.J.SAEBØ	
A cooperative yes-no query system featuring discourse particles.....	549
P.SAINT-DIZIER	
Default logic, natural language and generalized quantifiers.....	555
H.SAITO and M.TOMITA	
Parsing noisy sentences.....	561
M.H.SARNER and S.CARBERRY	
A new strategy for providing definitions in task-oriented dialogues.....	567
R.SCHA and L.POLANYI	
An augmented context free grammar.....	573
Y.SCHABES, A.ABEILLE and A.K.JOSHI	
Parsing strategies with 'lexicalized' grammars: application to Tree Adjoining Grammars....	578

D.SCHMAUKS and N.REITHINGER	
Generating multimodal output - conditions, advantages and problems.....	584
P.SCHMIDI	
A syntactic description of German in a formalism designated for machine translation.....	589
H.SCHNELLE panel moderator	
Parallel processing in computational linguistics.....	595
Panelists:	
G.COTTRELL, P.DEY, J.DIEDERICH, P.A.REICH, L.SHASTRI and A.YONEZAWA.....	595
K.SCHUBERT	
Implicitness as a guiding principle in machine translation.....	599
E.SCHUSTER	
Anaphoric reference to events and actions: a representation and its advantages.....	602
C.SCHWIND	
Sensitive parsing: error analysis and explanation	
in an intelligent language tutoring system.....	608
S.M.SHIEBER	
A uniform architecture for parsing and generation.....	614
H.SHIMAZU, Y.TAKASHIMA and M.TOMONO	
Understanding of stories for animation.....	620
P.SIBUN, A.K.HUETTNER and D.D.McDONALD	
Directing the generation of living space description.....	626
E.H.STEINER and J.WINTER-THIELEN	
On the semantics of focus phenomena in EUROTRA.....	630
O.STOCK, R.FALCONE and P.INSINNAMO	
Island parsing and bidirectional charts.....	636
K.Y.SU and J.S.CHANG	
Semantic and syntactic aspects of score function.....	642
B.V.SUKHOTIN	
Optimization algorithms of deciphering as the elements of a linguistic theory.....	645
Y.TATEISHI, Y.ONO and H.YAMADA	
A computer readability formula of Japanese texts for machine scoring.....	649
T.TOKUNAGA, M.IWAYAMA, H.TANAKA and T.KAMIWAKI	
Langlab: a natural language analysis system.....	655
H.TOMABECHI and M.TOMITA	
Application of the direct memory access paradigm to NL interfaces	
to knowledge-based systems.....	661
M.TOMITA	
Combining lexicon-driven parsing and phrase-structure-based parsing.....	667
P.TRESCASES and M.CROCKER	
Linguistic contribution to text-to-speech computer programs for French.....	671
H.TROST, E.BUCHBERGER and W.HEINZ	
On the interaction of syntax and semantics in a syntactically guided caseframe parser....	677
J.TSUJII, Y.MUTO, Y.IKEDA and M.NAGAO	
How to get preferred readings in natural language analysis.....	683
J.TSUJII and M.NAGAO	
Dialogue translation vs. text translation.....	688
T.van der WOUDE and D.HEYLEN	
Massive disambiguation of large text corpora with flexible categorial grammar.....	694
F.VAN EYNDE	
The analysis of tense and aspect in EUROTRA.....	699
C.H.VAN SCHOONEVELD	
The semantics and syntax of Russian pronominal structure: a feature breakdown.....	705
J.VERONIS	
Morphosyntactic correction in natural language interfaces.....	708
K.VIJAY-SHANKER and A.K.JOSHI	
Feature structures based Tree Adjoining Grammars.....	714
T.VLK	
Topic/focus articulation and intensional logic.....	720
N.WARD	
Issues in word choice.....	726
J.WEDEKIND	
Generation as structure driven derivation.....	732
W.WEISWEBER	
Using constraints in a constructive version of GPSG.....	738
E.WERNER	
A formal computational semantics and pragmatics of speech acts.....	744

Y.WILKS, D.FASS, Ch.GUO, J.E.McDONALD, T.PLATE and B.M.SLATOR	
Machine tractable dictionaries as tools and resources for NL processing.....	750
T.WITKAM	
DLT - an industrial R&D project for multilingual machine translation.....	756
M.McGee WOOD and B.J.CHANDLER	
Machine translation for monolinguals.....	760
A.YAMADA, T.NISHIDA and S.DOSHITA	
Figuring out most plausible interpretation from spatial descriptions.....	764
M.YAMASHINA and F.OBASHI	
Collocational analysis in Japanese text input.....	770
A.YONEZAWA and I.OHSAWA	
Object-oriented parallel parsing for context-free grammars.....	773
K.YOSHIMOTO	
Identifying zero pronouns in Japanese dialogue.....	779
R.ZAJAC	
Interactive translation: a new approach.....	785
C.ZELINSKY-WIBBELT	
Universal quantification in machine translation.....	791
U.ZERNIK	
Language acquisition: coping with lexical gaps.....	796
U.ZERNIK and A.BROWN	
Default reasoning in natural language processing .....	801
M.ZOCK, G.FRANCOPOULO and A.LAROUI	
Language learning as problem solving.....	806
D.FUM, G.GUIDA and C.TASSO	
A distributed multi-agent architecture for natural language processing.....	812
J.KLAVANS	
COMPLEX: a computational lexicon for natural language systems.....	815
H.KAJI	
An efficient execution method for rule-based machine translation.....	824
<b>CUMULATED INDEX OF CITED AUTHORS AND EDITORS (Compiled by D.Vargha).....</b>	<b>830</b>

## AUTHOR INDEX

<b>A</b> be, N. ....	1	<b>G</b> ailly, P.-J. ....	182
Abeillé, A. ....	7, 578	Gao, Q. ....	117
Adriaens, G. ....	142	Garigliano, R. ....	384
Ahrenberg, L. ....	13	Gasser, M. ....	185
Aizawa, T. ....	291	Gehrke, M. ....	237
Alonso, J.A. ....	19	Gerlach, M. ....	191
Amano, S. ....	488	Giachin, E.P. ....	196
Anick, P.G. ....	518	Gibbon, D. ....	202
<b>B</b> aker, E. ....	530	Golan, I. ....	205
Bátori, I. ....	25	Görz, G. ....	212
Bear, J. ....	28	Grover, C. ....	54
Beaven, J.L. ....	32	Guida, G. ....	812
Bech, A. ....	36	Gundel, J. ....	216
Beierle, C. ....	40	Guo, Ch. ....	750
Bémová, A. ....	46	<b>H</b> agert, G. ....	524
Bloemberg, W. ....	49	Hajič, J. ....	222
Boguraev, B. ....	54	Hajičová, E. ....	451
Boitet, Ch. ....	59	Harrington, J. ....	225
Bolshakov, I.A. ....	65	Hasida, K. ....	231
Borissova, E. ....	68	Hauenschild, C. ....	77
Bouchard, L.H. ....	166	Haugeneder, H. ....	237
Brajnov, S. ....	507	Hedberg, N. ....	216
Braun, G. ....	202	Heinz, W. ....	677
Briscoe, E. ....	54	Hellwig, P. ....	242
Brown, A. ....	801	Hess, M. ....	245
Brown, P. ....	71	Heylen, D. ....	694
Brown, R.D. ....	96	Hirst, G. ....	148, 255
Buchberger, E. ....	677	Hoepelman, J.Ph. ....	250
Busemann, S. ....	77	Horton, D. ....	255
<b>C</b> alder, J. ....	83	Huettner, A.K. ....	626
Calzolari, N. ....	87	Hugosson, A. ....	524
Campbell, W.N. ....	93	<b>I</b> keda, Y. ....	683
Carberry, S. ....	567	Insinnamo, P. ....	636
Carbonell, J.G. ....	96	Isabelle, P. ....	261
Carlson, L. ....	102	Iwayama, M. ....	655
Carroll, J. ....	54	<b>J</b> acobs, P.S. ....	267, 270
Carson, J. ....	106	Jäppinen, H. ....	275
Chandler, B.J. ....	760	Jelínek, F. ....	71
Chang, J.S. ....	642	Jensen, K. ....	448
Chen, H.H. ....	112	Joshi, A.K. ....	578, 714
Chen, Z. ....	117	Jurafsky, D. ....	278
Chung, M. ....	341	<b>K</b> ac, M.B. ....	285
Church, K.M. ....	335	Kaji, H. ....	824
Cocke, J. ....	71	Kakigahara, K. ....	291
Cooper, M. ....	225	Kamiwaki, T. ....	655
Correa, N. ....	123	Kaplan, R.M. ....	297, 303
Cottrell, G. ....	595	Karlgren, H. ....	306
Crocker, M. ....	671	Kasper, R.T. ....	309
Curteanu, N. ....	130	Kataja, L. ....	313
<b>D</b> aelemans, W. ....	133	Katz, B. ....	316
Danlos, L. ....	139, 359	Kesselheim, M. ....	49
Della Pietra, S. ....	71	Kilbury, J. ....	324
Della Pietra, V. ....	71	Kirschner, Z. ....	328
Devos, M. ....	142	Klein, E. ....	83
Dey, P. ....	595	Kohda, M. ....	402
Diederich, J. ....	595	Koit, M. ....	332
DiMarco, Ch. ....	148	Koshino, H. ....	341
Doi, T. ....	476	Koskenniemi, K. ....	313, 335
Domenig, M. ....	154	Kudo, I. ....	341
Doshita, S. ....	482, 764	Kuhn, R. ....	348
Dyer, M. ....	185, 530	Kuhns, R.J. ....	351
Dymetman, M. ....	261	Kunze, J. ....	306, 356
<b>E</b> berle, K. ....	160	<b>L</b> ancel, J.-M. ....	359
Emirikian, L. ....	166	Lang, B. ....	365
Engelberg, K.-J. ....	172	LaPolla, M.V. ....	372
<b>F</b> alcone, R. ....	636	Lappin, S. ....	205
Fass, D. ....	177, 750	Laroui, A. ....	806
Ferrari, G. ....	540	Lassila, E. ....	275
Francopoulo, G. ....	806	Lehtola, A. ....	275
Fum, D. ....	812	Lesmo, L. ....	378

Levin, B. ....	316	Saint-Dizier, P. ....	555
Lin, I-P. ....	112	Saito, H. ....	561
Liu, X. ....	482	Sarner, M.H. ....	567
Long, D.P. ....	384	Scha, R. ....	573
<b>M</b> acklovitch, E. ....	261	Schabes, Y. ....	578
Maegaard, B. ....	387	Schmauks, D. ....	584
Marino, M. ....	390	Schmidt, P. ....	589
Marok, S. ....	25	Schnelle, H. ....	595
Martin, J.H. ....	396	Schubert, K. ....	599
Matsunaga, S. ....	402	Schuster, E. ....	602
Max, I. ....	408	Schwind, C. ....	608
Maxwell, J.T. III. ....	297, 303	Shaked, V. ....	431
McDonald, D.D. ....	626	Shastri, L. ....	595
McDonald, J.E. ....	750	Shieber, S.M. ....	614
Melby, A.K. ....	411	Shimazu, H. ....	620
Menzel, W. ....	414	Sibun, P. ....	626
Mercer, R. ....	71	Simonin, N. ....	359
Mercer, R.E. ....	420	Slator, B.M. ....	750
Merkel, M. ....	426	Sprenger, M. ....	191
Meteer, M. ....	431	Steiner, E.H. ....	630
Meya, M. ....	437	Stock, O. ....	636
Mori, T. ....	454	Su, K.Y. ....	642
Morimoto, T. ....	341	Sukhotin, B.V. ....	645
Munster, E. van ....	442	<b>T</b> akamatsu, S. ....	476
Muto, Y. ....	683	Takashima, Y. ....	620
<b>N</b> agao, M. ....	448, 459, 683, 688	Tanaka, H. ....	655
Nakagawa, H. ....	454	Tani, T. ....	476
Nakamura, J. ....	459	Tasso, C. ....	812
Nakhimovsky, A. ....	465	Tateishi, Y. ....	649
Namer, F. ....	139	Terenziani, P. ....	378
Nenova, I. ....	507	Thompson, H. ....	535
Nirenburg, I. ....	471	Tokunaga, T. ....	655
Nirenburg, S. ....	471	Tomabechi, H. ....	661
Nishida, F. ....	476	Tomita, M. ....	453, 561, 661, 667
Nishida, T. ....	482, 764	Tomono, M. ....	620
Nogami, H. ....	488	Trescases, P. ....	671
Nygaard, A. ....	36	Trost, H. ....	677
<b>O</b> bashi, F. ....	770	Tsujii, J. ....	452, 683, 688
Ohsawa, I. ....	773	<b>V</b> an der Wouden, T. ....	694
Oliva, K. ....	46, 494, 498	Van Eynde, F. ....	699
Ono, Y. ....	649	Van Hoof, A.J.M. ....	250
Otani, M. ....	359	Van Schooneveld, C.H. ....	705
<b>P</b> aducheva, E.V. ....	501	Véronis, J. ....	708
Panevová, J. ....	46	Vidal, J. ....	437
Paulus, D. ....	212	Vijay-Shanker, K. ....	714
Pericliev, V. ....	507	Vlk, T. ....	720
Petkevič, V. ....	512	<b>W</b> ard, N. ....	726
Picchi, E. ....	87	Watson, G. ....	225
Pignataro, V. ....	515	Wedekind, J. ....	732
Plate, T. ....	750	Weisweber, W. ....	738
Plátek, M. ....	498	Werner, E. ....	744
Pletat, U. ....	40	Whitelock, P. ....	32
Polanyi, L. ....	573	Wilks, Y. ....	750
Prodanof, I. ....	540	Willems, Y.D. ....	142
Pustejovsky, J. ....	518	Winter-Thielen, J. ....	630
<b>Q</b> uilici, A. ....	530	Witkam, T. ....	756
<b>R</b> apaport, W.J. ....	465	Wood, M.McGee ....	760
Rayner, M. ....	524	Wu, C.-P. ....	112
Read, W. ....	530	<b>Y</b> amada, A. ....	482, 764
Reape, M. ....	535	Yamada, H. ....	649
Reeves, J. ....	530	Yamashina, M. ....	770
Reich, P.A. ....	595	Yonezawa, A. ....	595, 773
Reilly, R. ....	540	Yoshimoto, K. ....	779
Reithinger, N. ....	584	Yoshimura, Y. ....	488
Rimon, M. ....	205	<b>Z</b> acharsky, R. ....	216
Rindfleisch, T.C. ....	285	Zaharin, Y. ....	59
Roesner, D. ....	450	Zajac, R. ....	785
Rolf, P.C. ....	544	Zeevat, H. ....	83
Roossin, P. ....	71	Zelinsky-Wibbelt, C. ....	791
Rullent, C. ....	196	Zernik, U. ....	796, 801
<b>S</b> æebø, K.J. ....	549	Zock, M. ....	806