

ON THE 10TH ANNIVERSARY OF PRIP CONFERENCE: HISTORY AND RESEARCHERS

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This is the 10th Anniversary of the International Conference *Pattern Recognition and Information Processing - PRIP*. Started in 1991, PRIP Conference was held in **Minsk**, the capital of Republic of Belarus. The main goal of the PRIP was to establish cooperation between Belarusian researches and International Community in the mention field. We introduce a short summary of PRIP Conferences. We hope that it will help to increase activity of PRIP in new millennium.

1. THE FIRST PRIP CONFERENCE

Belarusian research in the area of pattern recognition and image processing was very strong in the former Soviet Union. It led that when in 1991 USSR Association of Pattern Recognition decided to organise First All-Union Conference 'Pattern Recognition and Image Analysis' (ROAI in Russian), the proposal to host this conference was made to Belarusian scientists. Initiative group of Belarusian scientists was a core who organised the Conference. The host organization was Institute of Engineering Cybernetics, Belarusian Academy of Sciences. The Conference was held in October 1991. More than 200 researchers participated in the Conference. Four volumes of the Proceedings have been published (Table 1).

Then, in December 1991, USSR stopped its existence. Such as all information about foreign events was passed in Moscow first, Belarusian scientists practically stopped receiving any information. It was one of the main motivation for our decision. Moreover, we have to say that most of the international activity in Pattern Recognition area has been organized by International Association for Pattern Recognition (IAPR). In 1988, USSR Association of pattern Recognition joined the IAPR. Then, in 1992, USSR Association became the Russian one, and Belarusian scientists had to think about their own steps. After the consultations with IAPR in autumn of 1992 it was decided to create Belarusian association. The meeting of Belarusian researchers working in image analysis and pattern recognition was held on December 14, 1992. At that meeting, Belarusian Association for Image Analysis and Recognition (BAIAR) was created. All necessary documents were prepared and BAIAR was officially registered as non-profit public organization in Belarus. In March 1993, IAPR considered all submitted documents and officially accepted BAIAR as a national representative of Belarus in IAPR.

Table 1

PRIP 1991-2001: papers, countries, language and chairs

PRIP	# of papers	# of countries	Working language	Chair
1991	171	1	Russian	Yu. Zhuravlev (<i>Computer Centre of the Soviet Academy of Sciences, Moscow, USSR</i>)
1993	85	4	Russian	S. Ablameyko (<i>Institute of Engineering Cybernetics, National Academy of Sciences, Minsk, Belarus</i>)
1995	107	7	Russian, English	S. Ablameyko (<i>Institute of Engineering Cybernetics, National Academy of Sciences, Minsk, Belarus</i>)
1997	130	16	English, Russian	V. Krasnoproshin (<i>Belarusian State University, Minsk, Belarus</i>)
1999	113	22	English, Russian	R. Sadykhov (<i>State University of Informatics and Radioelectronics, Minsk, Belarus</i>)
2001	74	22	English	S. Ablameyko (<i>Institute of Engineering Cybernetics, National Academy of Sciences, Minsk, Belarus</i>)

2. THE SECOND PRIP CONFERENCE

In 1992-1993, economic situation in the former Soviet Union republics was very difficult. The financial problems led to reduction of a number of scientific events held annually in the USSR. Only the most known and well established conferences continue to be held but their attendance were very reduced. The attendance of international conferences in other countries was practically impossible due to financial difficulties. In spite of all these problems, BAIAR decided that the second PRIP must take place. BAIAR formulated the goal of the PRIP Conference as follows: **to establish cooperation between Belarussian researchers and International Community in the field of Pattern Recognition and Image Analysis.**

It was done all preparation, and in October 1993 the Conference was held. The host organization was Institute of Engineering Cybernetics. The attendance was not big due to deep crisis, so mainly scientists from Belarus attended the Conference. One volume of the Proceedings has been published. The official Conference language was Russian.

3. PRIP TO BECOME AN INTERNATIONAL CONFERENCE

The strong attempt to increase level of the third PRIP Conference was made in 1995. There were made several important decisions by BAIAR, namely:

- (a) two conference languages: Russian and English.
- (b) to change the title of the Conference. It started to call "*Pattern Recognition and Information Processing*" in English. Changing the name was made to be separated from Russian ROAI Conference.
- (c) To start intensive cooperation with International Institutions.

Three volumes of Proceedings have been published: one volume was published in English in Poland, and two volumes were published in Russian in Minsk. The main organization was the Institute of Engineering Cybernetics.

It was decided at that Conference that three Belarusian organizations, namely,

- Institute of Engineering Cybernetics of the National Academy of Sciences
- Belarusian State University and
- Belarusian State University of Informatics and Radioelectronics

would organise the Conference on rotation base.

4. FORMING THE TRADITIONS

The fourth PRIP Conference. In 1997, the fourth PRIP Conference was held in Belarusian State University. In 1997 PRIP, for the first time, has obtained the IAPR Sponsorship that immediately attracted more scientists to the Conference. There were about 100 participants, and 130 papers submitted to the PRIP'97. The Conference Proceedings (720 pages) have been published in two volumes (one volume in Poland, and the second one in Belarus).

The fifth PRIP Conference. In 1999, the Conference was held in Belarusian State University of Informatics and Radioelectronics. Papers from 22 countries have been presented at the Conference. It attracted more than 100 participants and 113 papers. The Proceedings (636 pages) have been published in two volumes (one volume in Poland, and the second one in Belarus).

The sixth PRIP Conference. For 2001, BAIAR decided that English would be the only Conference language. In 2001, the Institute of Engineering Cybernetics hosts the Conference. 74 papers from 22 countries have been accepted for the Conference. The Proceedings (about 600 pages) are published in two volumes (one volume in Poland, and the second one in Belarus).

3. PRIP TOPICS

The main topics of the PRIP Conference are the following:

- Pattern Recognition
- Image Analysis
- Signal Processing
- Biometric Technologies
- Systems and Parallel Architectures for Signal and Image Processing
- Knowledge - Based Expert and Decision Support System
- Application of Pattern Recognition and Image Analysis
- 3D Image Processing and Modelling

In addition to these traditional topics, new emerged topics were always discussed at the PRIP. Some examples of new topics are: moving object recognition, watermarking, human identification approaches, fuzzy classifiers, and others.

4. PRIP ORGANIZERS

PRIP is a biennial event that is organised by the following bodies:

- Institute of Engineering Cybernetics of National Academy of Sciences (Belarus)
- Belarusian State University (Belarus)
- Belarusian State University of Informatics and Radioelectronics (Belarus)
- Technical University of Szczecin (Poland)

PRIP is sponsored by the following bodies:

- | | |
|--|-------------------|
| ▪ International Association for Pattern Recognition | <i>from 1997</i> |
| ▪ Belarusian Association for Image Analysis and Recognition (IAPR national member) | <i>from 1993</i> |
| ▪ IEE Belarus Centre | <i>from 1993</i> |
| ▪ IEEE Computer Society Belarus Sub-Committee | <i>from 1999</i> |
| ▪ INTAS | <i>2001</i> |
| ▪ Ministry of Education | <i>1997, 1999</i> |
| ▪ Belarusian Fund of Fundamental Research | <i>1999, 2001</i> |
| ▪ Belarusian Fund of Informatization | <i>1995</i> |

5. BELARUSIAN ASSOCIATION FOR IMAGE ANALYSIS AND RECOGNITION

As mentioned above, BAIAR has been founded in December 1992. The main goals of the BAIAR are the following:

- to develop Pattern Recognition theory and applications in Belarus.
- exchange information and experience of the different scientific groups working in this field;
- organise conferences, seminars, exhibitions, and experts in this field;
- assistance to establish relations with foreign researchers;
- publication of Belarusian scientists results in the field of Pattern Recognition.

The number of researchers who work in Pattern Recognition field in Belarus is around 200.

BAIAR Governing Board

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6. MAIN RESULTS AND FUTURE PROSPECTS

Nowadays, the PRIP Conference became a well-known and established Conference. Information about PRIP is included in all major home pages on Computer vision and Pattern Recognition. The Conference proceedings are cited in INSPEC, the main world database of publications.

One of the principal outcome of the PRIP is the increasing of the presentation level of results by Belarusian scientists. It is one of our aims to give Belarusian researchers (especially young ones) a chance to present their results for international community. Thanks to PRIP, many researches got fellowships and contracts in Western Institutions. Among them many young and

promising researches. PRIPs can be consider as a top form of our International collaboration because many published papers are results of joint projects, visiting programs with more ten countries.

BAIAR formulates the main goals for the future as follows:

- (a) to increase the level of papers presented at PRIP and make PRIP a top-level International Conference on Pattern Recognition and Image Analysis,
- (b) to continue our tradition to held PRIP in Minsk, the capital of Republic of Belarus, one of the beautiful European cities. BAIAR argues this decision that organizers have the opportunity to introduce unique Belarusian traditions, history and culture for International Community.

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All our colleagues who worked with us during these 10 years in PRIP organisation.