

T. XX (2017) Z. 3 (47)
ISSN 1509-1074

ROCZNIK
HISTORII PRASY POLSKIEJ

Czasopismo
popularnonaukowe „Urania”
— geneza i rozwój
do 1958 roku

**The popular-scientific
magazine *Urania*
— its origins
and development
up to 1958***

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SŁOWA KLUCZOWE:
czasopisma popularnonaukowe, „Urania”,
popularyzacja nauki, Polskie Towarzystwo
Miłośników Astronomii

KEY WORDS:
popular-scientific magazines, *Urania*,
popularisation of science, Association of Polish
Amateur Astronomers

ABSTRAKT
Artykuł prezentuje rozwój czasopisma „Urania” w latach 1921–1958. Cele, zadania, układ formalny, zawartość treściową i historię periodyku nakreślono na tle działalności popularyzacyjnej Polskiego Towarzystwa Miłośników Astronomii, którego organem była wówczas „Urania”. Jego wybitni członkowie, profesorowie astronomii, piastowali stanowiska redaktorów naczelnych, dbając o wysoki poziom merytoryczny. Najstarsze polskie czasopismo popularyzujące astronomię wśród młodzieży i dorosłych ukazuje się do chwili obecnej w zmienionej formie, a artykuł jest kolejnym przyczynkiem do monograficznego opisanie jego historii.

ABSTRACT
The article presents the development of the *Urania* from 1921 to 1958. The aims, tasks, formal presentation, contents and history of the periodical are outlined alongside the popularisation activities of the Association of Polish Amateur Astronomers, which published journal at the time. Its distinguished members, professors of astronomy, occupied the position of editors, taking care that the publication was high quality. The oldest Polish journal dedicated to the popularisation of astronomy is still published today in an altered form, and this article is another contribution towards telling its story in book form.

* This article is a part of a science project “Polskie czasopiśmiennictwo popularnonaukowe do 1939 roku” funded by National Science Center, number UMO 2014/15/B/HS2/01071.

Summary

2017 marked the 95th anniversary of the first publication of *Urania*, a popular science journal which presents astronomical achievements. Its beginnings can be traced back to 1919, when a few dozen copies of the first issue of *Urania* were published by Warsaw secondary school students from an Amateur Astronomers' Club supervised by Dr. Felicjan Kępiński.

The article presents the development of the magazine up to 1958. The aims, tasks, formal presentation, contents and history of the journal are outlined alongside the popularisation activities of the Association of Polish Amateur Astronomers (PTMA), which published *Urania* at the time. Its distinguished members, professors of astronomy, occupied the position of editors, taking care that the publication was high quality.

Even in the interwar years, the main aim of the magazine was, apart from popularising the achievements of astronomy among wide sections of the population, to create connections between Polish observatories and Polish society by giving out information about the development of Polish astronomical centres, and also to promote active astronomical work among members of the Association of Polish Amateur Astronomers, as well as unregistered enthusiasts. In the period in question, the formal structure of the periodical did not undergo any significant changes. Along with the rapid development of astronomy and the increasing activity of the PTMA, the number of articles on issues grew, as well as the amount of material sent in by readers and the length of individual issues, which were finally published monthly in the 50s, with a circulation of between six and seven thousand copies. The oldest Polish journal dedicated to the popularisation of astronomy is still published today in an altered form, and this article is another contribution towards telling its story in book form.

Streszczenie

W 2017 roku minęło 95 lat od powstania popularnonaukowej „Uranii”, która aż do chwili obecnej przybliżyła zainteresowanym osiągnięcia astronomii. Jej początków można szukać w 1919 roku, gdy pierwszy numer „Uranii”, wydali w kilkudziesięciu egzemplarzach uczniowie maturalnych klas gimnazjów warszawskich zebrani w Kole Miłośników Astronomii, pod opieką dra Felicjana Kępińskiego.

W artykule, przedstawiono rozwój czasopisma do 1958 roku. Cele, zadania, układ formalny, zawartość treściową i historię periodyku nakreślono na tle działalności popularyzacyjnej Polskiego Towarzystwa Miłośników Astronomii, którego organem była wówczas „Urania”. Jego wybitni członkowie, profesorowie astronomii, piastowali stanowiska redaktorów naczelnych, dbając o wysoki poziom merytoryczny.

Już w okresie międzywojennym głównym celem wydawania czasopisma było, obok popularyzowania zdobyczy astronomii wśród najszerszych warstw społeczeństwa, także wytworzenie łączności między polskimi obserwatoriami i społeczeństwem polskim poprzez informowanie o rozwoju polskich placówek astronomicznych, a także propagowanie wśród członków Polskiego Towarzystwa Przyjaciół Astronomii i niezrzeszonych pasjonatów czynnej pracy astronomicznej. W omawianym okresie budowa formalna periodyku nie ulegała znacznym zmianom. Wraz z szybkim rozwojem astronomii i wzrastającą aktywnością PTMA rosła liczba artykułów problemowych i materiałów przesyłanych przez czytelników oraz objętość poszczególnych numerów, które ostatecznie w latach 50. wydawano co miesiąc w nakładach od sześciu do siedmiu tysięcy egzemplarzy. Najstarsze polskie czasopismo popularyzujące astronomię wśród młodzieży i dorosłych ukazuje się do chwili obecnej w zmienionej formie, a artykuł jest kolejnym przyczynkiem do monograficznego opisanie jego historii.

The Association of Amateur Astronomers (Towarzystwo Miłośników Astronomii — TMA), founded in 1921 as Poland was being reborn, conducted a wide range of activities which aimed to popularise astronomy. Apart from publishing the journal “Urania”, it organised sky viewings for the public in its own observatory named “Dostrzegalnia”, and in the University of Warsaw Astronomical Observatory. There was considerable interest in the observation sessions in “Dostrzegalnia”, as shown by the fact that entrance cards were issued many days in advance¹. Talks were frequently used as a form of popularisation. The members of the Association would give them at discussion meetings in the Physics Department of the University of Warsaw and via the new medium of radio. In the years 1927–1928 alone, 15 discussion meetings and 5 radio programmes were organised. Aiming to interest more young people in astronomy, TMA announced its intention to give talks to schools, from 1927 onwards, each year. The reports show that out of about 61 schools, only seven to eight per year responded positively to this initiative².

From its beginnings, the Association of Amateur Astronomers owned a library and reading room, which played a significant role in expanding interest in astronomy. Between 1927 and 1931, the “The Astronomical Calendar of the Polish Association of Friends of Astronomy” (Kalendarz Astronomiczny Polskiego Towarzystwa Przyjaciół Astronomii) was published every year, and the branch in Poznań published a “Revolving map of the sky” (Obrotowa mapa nieba) in 1935³.

A new chapter of the pre-war history of the Association began in 1929, when the statute was approved, the name was changed to the Polish Association of Friends of Astronomy (Polskie Towarzystwo Przyjaciół Astronomii — PTPA) and the organisation of the Association was restructured. Branches in Częstochowa, Warsaw and Lwów were formed. Towards the end of 1933 (in November), a branch was formed in Poznań. The branch in Częstochowa put on a few talks as early as 1932, on “the origins of the Earth, the Sun, the Moon and the planets” and recorded good attendance figures (approx. 1200) at the viewings at the Astronomical Observatory in Staszic Park⁴. The

¹ L. Zajdler, *45 lat Polskiego Towarzystwa Miłośników Astronomii*, „Urania” 1967, no. 2, p. 39.

² *Sprawozdanie z działalności Towarzystwa Miłośników Astronomii w r. 1927*, „Urania” 1928, no. 1, p. 17–23.

³ T. Grzesło, J. Rolewicz, *Polskie Towarzystwo Miłośników Astronomii*, [in:] *Słownik polskich towarzystw naukowych*, t. 1, red. L. Łoś, Wrocław 1978, s. 270.

⁴ *Sprawozdanie z działalności Oddziału Częstochowskiego PTPA*, „Urania” 1933, no. 1–2, p. 11.

branch in Lwów, apart from giving talks with discussions for adults, and sky viewings for young people, opened a permanent magazine reading room with a book lending room for members of the Association in 1932⁵. The branch in Poznań organised three sky viewings, a visit to the University of Poznań Astronomical Observatory, and two public talks, as early as 1932⁶. Up to the outbreak of war, the number of members did not change significantly, and did not exceed 300 people.

During the war, PTPA officially ceased to exist, but carried out secret activities. The only official sign of activities of amateur astronomers was the creation in 1940 of an Astronomical Association called “Wiedza” (“Knowledge”) in Sporysz (in the region of Żywiec), which published an irregular newsletter called “The Mathematics and Astronomy Monthly” (“Miesięcznik Matematyczno-Astronomiczny”). In 1943, the Astronomical Observatory in Dolna Woda on the outskirts of Sulejów was founded, which issued official reports of its activities from March 1943⁷.

After occupation, PTMA resumed its activities in 1948 in Krakow, and good conditions for growth allowed for a rapid increase in membership. In 1948–1958, the number of amateur astronomers increased systematically from 354 to 2900⁸. During this period, the presidents of the Association were Jan Gadomski, and, from 1949, Władysław Kucharski. Activities were conducted in six branches (in Krakow, Łódź, Myślenice, Nowy Sącz, Warsaw and Wrocław), 18 local clubs and 134 youth clubs, which gathered candidate-members⁹. The Polish Association of Amateur Astronomers popularised astronomy with film screenings (1,694 in 1952), public talks, radio talks, popular science films, discussion papers in PTMA clubs, discussion papers in school youth clubs given by teams of speakers, meetings with papers written by students supervised by astronomy teachers, sky viewings organised at fixed observational points (Gliwice, Jędrzejów, Krakow, Nowy Sącz, Poznań, Katowice, Warszawa, Wrocław and in the field; overall 425 viewings in 1953¹⁰), exhibitions, presentations and training sessions in the construction of observational instruments, publications (maps of the moon, descriptions of planets, atlases of the sky, guidebooks), organising and running libraries, and continuing to publish the popular-scientific magazine *Urania*.

As a propagator of knowledge about the universe, the Association taught a scientific view of the world, brought people who were interested in astronomy together, acquainted members with progress in astronomical knowledge, and

⁵ *Sprawozdanie z działalności Zarządu Oddziału Lwowskiego PTPA za rok 1932*, „Urania 1933, no. 1–2, s. 12–13.

⁶ *Sprawozdanie z działalności Zarządu Oddziału Poznańskiego PTPA za r. 1934*, „Urania” 1934, no. 3/4, p. 29.

⁷ T. Grzesło, J. Rolewicz, *Polskie Towarzystwo Miłośników Astronomii...*, p. 270.

⁸ L. Zajdler, *45 lat Polskiego Towarzystwa Miłośników Astronomii...*, p. 41–42.

⁹ *Sprawozdanie z działalności P.T.M.A. w roku 1953*, „Urania” 1954, no. 5, p. 144–152.

¹⁰ *Ibidem*, p. 148.

encouraged young people to broaden their knowledge of astronomy or study the field at university. Many astronomers from subsequent post-war generations, including future professors of astronomy, started out as members of PTMA. In 1953, which was declared to be the year of Copernicus, a national convention for amateur astronomers was organised, and in 1954, a scientific expedition for members of PTMA, to Sejny to observe the total eclipse of the Sun (in June).

2012 marked the 90th anniversary of the publication of the first issue of the popular-scientific magazine “Urania”. The beginnings of the publication go back to November 1919, however, when the Amateur Astronomers’ Club (Kóło Miłośników Astronomii), printed a few dozen booklets of a quarterly entitled “Uranja”, using a spirit duplicator. The editors chose to use a muse for the title of the magazine, the patron of astronomy, in order to emphasise the idea of a humanistic approach to the science of astronomy. It is interesting to note that the printing house on Marszałkowska Street, which printed the publication, was called “Saturn”. It was published by final year students from Warsaw secondary schools: Stefan Kaliński, Jan Mergetaler, Stanisław Mrozowski (they were later active in *PTMA* and on the editorial board of “Urania”) and around twenty secondary school students under the supervision of their teacher, Dr. Felicjan Kępiński, who was also the temporary director of the University of Warsaw Observatory¹¹, and was later known as a researcher into the orbits of comets. In 1919–1920, they managed to publish four booklets, each priced at 4 marks, which are now rarities¹². In the Urania Digital Archives, you can see issues two and three from 1920, which, apart from lengthy articles, included regular features: Astronomical Life, An Astronomical Calendar, Advice and Practical Tips¹³. In 1921, the “Urania” booklets did not appear for two months.

The Association of Amateur Astronomers published the first issue of “Urania” in 1922 in Warsaw, and it had a structure of contents which was maintained by subsequent editors until 1989. The first two booklets were edited by the aforementioned Felicjan Kępiński, who was also the president of TMA. From the third issue, the role of editor-in-chief was assumed by the geophysicist Edward Stenz, who in turn was replaced¹⁴ by Eugeniusz Rybka, when the former moved to Gdańsk in 1926. From 1933 to the end of 1934, journal was edited jointly by Lucjan Orkisz and Edward Stenz.

The formal structure of the magazine was made up of articles on various issues, sometimes the texts of talks given at meetings which aimed to popularise astronomy, and sections entitled: *The Astronomical Calendar*, *A Review of Astronomical*

¹¹ L. Zajdler, *Na marginesie sześćdziesięciolecia „Uranii”*, „Urania” 1979, no. 10, p. 305.

¹² A.K. Wróblewski, *80 lat astronomii...*, [Available in World Wide Web] http://urania.pta.edu.pl/upal_2003.html.

¹³ Urania Digital Archive, <http://www.uraniamuseum.edu.pl/archiwum>.

¹⁴ *Kronika TMA*, „Urania” 1926, no. 1, s. 22.

Literature, Observations, The Astronomical Chronicle (which was 4 pages long, and included information about the latest research and discoveries). In the section entitled *The TMA Chronicle*, the Association included information and reports about the activities of the Central Committee and the various branches. In issue 3 in 1929, a “Bibliography of Polish Astronomical Works” was published for the first time, which featured only academic papers and was printed for many years to come, including when “*Urania*” was published as an addition to “*Mathesis Polska*”. The first editor introduced a table of contents in French from the second issue, and this was continued by subsequent editors until the third issue of 1927.

The quarterly included shorter articles on current issues, as well as the longer articles on problems. One of the most important was an article on the first discovery of a comet by a Pole, Lucjan Orkisz, a research assistant at the Kraków Observatory and a member of TMA. The comet was named *Orkisz’s Comet (1925 c)*¹⁵. It is worth mentioning at this point that, thanks to Lucjan Orkisz’s heir, all the materials he left behind are in the main library of the Pedagogical University of Cracow, and are available to historians of science. In the very next year, Dr. Antoni Wilk, a member of TMA, also discovered a comet and described this in *Urania*¹⁶. Antoni Wilk later discovered two more comets — in 1929 and 1930¹⁷.

The editorial board of the magazine informed its readers about the basis on which the astronomical knowledge of the time was founded by publishing articles which discussed the life and research activities of famous astronomers, usually on the occasion of anniversaries or deaths¹⁸. In 1926–1931, the editorial board decided to systematically instruct its readers on basic astronomical knowledge by publishing articles in a series entitled “Secrets of the Universe”.

Urania was published as a quarterly from 1922. However, in 1923, the first issue was only published in June due to the currency crisis, and subsequent issues were postponed for a year and a half. Booklet 6 was published in December 1924¹⁹ and then there was another break for five months, when the double booklet 7/8 appeared. In 1929, the Association took on the challenge of publishing the booklets at monthly intervals with a reduced content of 16 pages. Unfortunately, at the end

¹⁵ E. Rybka, *Kometa Orkisz (1925 c)*, „*Urania*” 1925, no. 7/8, p. 21–22.

¹⁶ A. Wilk, *Jak odkryłem nową kometę*, „*Urania*” 1926, no. 1, p. 16–17.

¹⁷ L. Orkisz, *Kometa Wilka (1929 d)*, „*Urania*” 1929, no. 9/10, p. 148–150; L. Orkisz, *Kometa Wilka (1930 c)*, „*Urania*” 1930, no. 1/2, p. 20–22.

¹⁸ M. Białęcki, *Kamil Flammarion: (z powodu 80 letniej rocznicy urodzin i 60 letniej pracy naukowej)*, „*Urania*” 1922, no. 2, p. 55–56; F. Kępiński, *Mikołaj Kopernik: (w 450-tą rocznicę urodzin)*, „*Urania*” 1923, no. 3/4, p. 72–77; M. Białęcki, *Kamil Flammarion: 26 II 1842 – 3 VI 1925*, „*Urania*” 1925, no. 9, p. 79–81; J. Mergentaler, *Isaak Newton (1727–1927)*, „*Urania*” 1927, no. 1, p. 8–10; B. Rafalski, *Urban Le Verrier: (z powodu 50-o letniej rocznicy śmierci)*, „*Urania*” 1927, no. 3, p. 122–128.

¹⁹ *Od wydawnictwa*, „*Urania*” 1924, no. 6, p. 1.

of 1929, the Association was experiencing financial difficulties and the October issue appeared late, and the next was a November/December 1929 double issue in the middle of 1930. Along with the reorganisation and restructuring into the Polish Association of Friends of Astronomy (Polskie Towarzystwo Przyjaciół Astronomii — PTPA), the first double booklet (1/2) in 1930 appeared as a PTPA monthly, edited by Lucjan Orkisz, who was mentioned above. In 1931–1932, *Urania* was published as an addition to the scientific magazine *Mathesis Polska*, which was about the sciences and their methodologies. The co-publishers were Edward Stenz, physicist Stanisław Warhaftman, and the mathematician Kazimierz Zarankiewicz. Five issues were published each year. In February 1932, due to an improvement in the material status of the Association, the PTPA approved the publication of “*Urania*” as an independent monthly in the same form as before²⁰.

In 1935, publication was suspended due to the editorial office being moved from Warsaw to Lwów. In 1936 Eugeniusz Rybka, professor of astronomy at Jan Kazimierz University in Lwów became editor-in-chief. As the new editorial board said at the time, the magazine aimed to popularise the achievements of astronomy among society at large, and also “to create connections between Polish observatories and Polish society by giving out information about the development of Polish astronomical centres and propaganda about active astronomical among members of the Polish Association of Friends of Astronomy and other people who love to learn about celestial bodies”²¹. Apart from help from scientists, the editorial board also expected co-operation from secondary school students, and counted on them being interested in learning about the universe²².

In terms of presentation, “*Urania*” grew to eight sections at that time: I *Articles*, II *Scientific chronicles*, III *Astronomy in Poland*, IV *Astronomy in Secondary Schools*, V *Reviews of publications*, VI *Observations*, VII *The Life of the Polish Association of Friends of Astronomy*, VIII *The Astronomical Calendar*. Not all of them were included in a single booklet, however. The most important part of each issue were still monographs in which the authors raised topics which were typical of the interests of astronomers of the time. Examples include inspiring articles about Mars, cepheids, new stars, double stars, white dwarfs, measuring stars’ diameters, the chemistry of stars and nebulae and measurements of the universe. Information about spectacular phenomena observed in Poland was also given. Articles on the northern lights were published, which were related to the solar sunspot maximum (predicted to happen in 1939)²³.

²⁰ Redakcja „*Uranji*”, *Do Czytelników*, „*Urania*” 1933, no. 1–2, wklejka na p. 1.

²¹ *Od redakcji*, „*Urania*” 1937, no. 1, p. 1.

²² E. Rybka, *Od redakcji*, „*Urania*” 1936, no. 1, p. 1.

²³ W. Dziewulski, *Obserwacje zorzy północnej w dniu 30 września 1937 r.*, „*Urania*” 1937, no. 5, p. 94–96; E. Stenz, *Zorza Polarna z dn. 25–26 stycznia 1938*, „*Urania*” 1938, no. 2, p. 21–24; W. Tęcza, *Obserwacje Zorzy Północnej dokonane na Stacji N.I.A. na Lubomirze oraz w Obserwa-*

Professional astronomers also printed reports of international astronomical congresses and conferences in the journal²⁴.

Much attention was still given to presenting profiles of great astronomers. On the 250th anniversary of his death, Jan Heweliusz was honoured in the form of an article by Zbigniew Woźniewski²⁵, and Władysław Dziwulski wrote a lengthy article dedicated to Jan Jędrzejewski, a doctor by profession and an amateur astronomer, on the hundredth anniversary of his birth²⁶. The life and achievements of William Herschel, the creator of the astronomy of stars, were presented in 1939 by Eugeniusz Rybka²⁷. Astronomers who died during that period were not forgotten: the lives and achievements of George E. Hale and Piotr Lubicz Strzeszewski were described in lengthy articles²⁸.

In the permanent section entitled *Scientific Chronicles*, articles about current hypotheses and astronomical and technical discoveries were published. The editorial board, aiming to create a connection between observatories and society, introduced the section *Astronomy in Poland* from issue 2 (April) 1936, where information about important events in observatories and astronomical institutions was given²⁹. From issue 1 in 1938, the editors included the section *Astronomy in Secondary Schools*, which featured articles about the teaching of astronomy, news of astronomical essays in schools and reviews of publications dedicated to teaching astronomy³⁰. The *Observations* section appeared again in 1938 in issues 2 and 4, having been included in the first issues in the twenties, and was also featured in post-war issues. Readers published the results of their observations in this section. Book reviews appeared in the *Reviews of publications* section. Each booklet finished with an *Astronomical Calendar*, which was also continued in the post-war editions. From 1938, the contents page on the inside front cover was once again written in French, which was the international language of science at that time.

“Urania” was published as a bimonthly publication at that time, with a summer break in July and August. In 1937, for reasons beyond the editorial board’s control,

torium U.J. w Krakowie; W. Dziwulski, *Obserwacje zorzy północnej w Wilnie*, „Urania” 1939, no. 3, p. 52–54.

²⁴ J. Gadomski, *Wrażenia z Kongresu Międzynarodowej Unii Astronomicznej w Paryżu*, „Urania” 1936, no. 3, p. 45–50; E. Rybka, *Kongres Międzynarodowej Unii Astronomicznej w Sztokholmie 3–10 sierpnia 1938 r.*, „Urania” 1938, no. 4, p. 61–68.

²⁵ Z. Woźniewski, *W 250 lecie śmierci Jana Heweliusza*, „Urania” 1937, no. 4, p. 61–68.

²⁶ W. Dziwulski, *Jan Jędrzejewicz: (1835–1887) w setną rocznicę Jego urodzin*, „Urania” 1936, no. 2, p. 21–33.

²⁷ E. Rybka, *William Herschel twórca astronomii gwiazdowej (1738–1822)*, „Urania” 1939, no. 1, p. 1–8.

²⁸ E. Stenz, *G.E. Hale*, „Urania” 1938, no. 4, p. 68–70; E. Stenz, *Piotr Lubicz Strzeszewski (wspomnienie pośmiertne)*, „Urania” 1939, no. 1, p. 11–15.

²⁹ [Notka redakcyjna], „Urania” 1936, no. 1, p. 35.

³⁰ Redakcja Uranii, *Astronomia w szkole średniej*, „Urania” 1938, no. 1, p. 8–9.

mostly financial ones, printing was put on hold for two months³¹. The last booklet published in Lwów was due to appear in June 1939. A yearly subscription was 4.50 zł for 5 booklets in 1936–1939, and PTPA members received the magazine for free, since the Polish Association of Friends of Astronomy received a subsidy from the authorities for publishing the periodical. Overall, from 1922–1939, 65 booklets of journal in a 20 cm format were published. At this time, the magazine changed its appearance (better paper quality and design) and its place of publication from Warsaw to Lwów. The circulation of the magazine did not exceed 500 copies up to 1939.

After a seven-year break, caused by the war and occupation, “Urania” was published again in 1946 as the journal of the Polish Association of Friends of Astronomy, which was finally registered only in 1948 under the name of the Association of Polish Amateur Astronomers (Polskie Towarzystwo Miłośników Astronomii). The editorial office was in Kraków until 1958. In the post-war years until 1949, the editor was Jan Gadomski, in 1950–1955 Stefan Piotrowski, and in 1955, the editorial responsibilities were taken over by Konrad Rudnicki. In 1956–1957, the editor was Adam Strzałkowski³², while in 1958, when no name was given for the editor, the chairman of the editorial board was Prof. Włodzimierz Zonn. The editorial board always aimed “to meet the cultural needs of those who love the science of the sky, and to work with teaching staff and upper secondary school students³³”, who had been learning astronomy as a separate subject at school since the Second World War. After the war, the magazine inspired interest in astronomy, geophysics and astronautics and was a medium for connecting old and new members of the Polish Association of Amateur Astronomers and friends of astronomy. The Ministry of Education confirmed its worth as a popularisation publication by recommending it as “desirable in secondary school and teacher libraries by order this day 20.X.1950”³⁴.

The contents of each issue started off with between two and eight topical articles. Issue 3–4 in 1946 contained 8 articles — the highest amount. Issues 7–8, 9–10 and 11–12 in 1950 contained two articles — the lowest amount. The initial issues, edited by Jan Gadomski, recorded the losses that Polish astronomy had suffered during occupation. Delays in relaying news caused by the war were addressed. For example, the first news about radioastronomy, which had been started in 1932 by Karl Jansky, was received by readers of “Urania” in 1951 in an article by Wilhelmina Iwanowska³⁵. The blame for this situation can perhaps be attributed to the whole

³¹ Redakcja Uranii, *Od redakcji*, „Urania” 1937, no. 1, p. 1.

³² S. Lubertowicz, *Czterdziestolecie czasopisma „Urania”*, „Urania” 1962, no. 5, p. 137.

³³ *Od redakcji*, „Urania” 1946, no. 1–2, p. 2.

³⁴ „Urania” 1951, no. 1, p. 1.

³⁵ W. Iwanowska, *Astronomia radiowa*, „Urania” 1951, no. 11–12, p. 232–242.

astronomical community, which ignored the results of Jansky's experiments. It was only after the war that interest in radioastronomy grew³⁶.

The editorial boards of the post-war "Urania" continued the tradition of marking anniversaries and memorable dates. In 1953, the Copernicus Year, to mark the 480th anniversary of Copernicus' birth, each booklet began with an article related to the life and work of this great astronomer, and this was continued up to issue 4 in 1954, when an article appeared about one of Copernicus' students — Jerzy Joachim von Lauchen, known as Retyk³⁷. Long articles presenting the lives and works of famous astronomers³⁸ appeared on the 250th anniversary of Edmund Halley's discovery of the periodicity of comets, the 120th anniversary of Jan Walery Jędrzejewicz's birth, and the 200th anniversary of Jan Śniadecki's birth. The magazine presented not only the lives and works of well-known historical astronomers (Jan Heweliusz, Stanisław Rola Lubieniecki), but also contemporary Polish and foreign scientists (Adam Prażmowski, James Jeans)³⁹. While great significance was attached to acquainting readers with the history of astronomy (apart from biographies of astronomers, articles appeared about the development of astronomy in ancient Babylon, Egypt, China and Central America⁴⁰), the latest achievements in the USA were discussed widely, as well as recent events related to international anniversaries and congresses⁴¹.

In 1954, from the second issue, one article in each booklet presented another planet in our solar system. "Scientific columns" were also published in "Urania", on general topics from the fields of physics and mathematics, such as numbers, space, movement, written by Lidia Stankiewicz-Piegzowa. They appeared until her death

³⁶ Za A.K. Wróblewski, *80 lat astronomii z „Uranii”*, „Urania — Postępy Astronomii” 2003, no. 1, [available on the internet] http://urania.pta.edu.pl/upal_2003.html.

³⁷ J. Radomski, *Jedyny uczeń Kopernika*, „Urania” 1954, no. 4, p. 101–105.

³⁸ M. Karpowicz, *Edmund Halley*, „Urania” 1955, no. 1, p. 1–8; J. Gadomski, *Jan Walery Jędrzejewicz największy polski astronom-amator*, „Urania” 1955, no. 4, p. 97–101; W. Dziewulski, *Dwóchsetna rocznica urodzin Jana Śniadeckiego*, „Urania” 1956, no. 8, p. 232–233.

³⁹ J. Gadomski, *Adam Prażmowski, pierwszy astrofizyk polski*, „Urania” 1956, no. 4, p. 97–102; J. Radomski, *Jan Heweliusz*, „Urania” 1954, no. 5, p. 133–135; J. Gadomski, *Theatrum comicum Stanisława Rola Lubienieckiego*, „Urania” 1954, no. 6, p. 165–167; J. Gadomski, *Sir James Jeans*, „Urania” 1946, no. 3–4, p. 53–55.

⁴⁰ T. Milewski, *Obserwacje astronomiczne przed 5000 lat*, „Urania” 1952, no. 1, p. 9–14; W. Tęcza, *Wiedza o niebie przed 19 999 laty*, „Urania” 1948, no. 10–12, p. 141–145; W. Tęcza, *Nauka o niebie w Chinach*, „Urania” 1949, no. 1–3, p. 3–11; W. Tęcza, *Babilońskie sądy i przesądy o gwiazdach*, „Urania” 1949, no. 4–6, p. 51–58; W. Tęcza, *Astronomia nad Nilem w czasach najdawniejszych*, „Urania” 1949, no. 7–9, p. 108–112.

⁴¹ K. Kozieł, *Przegląd najnowszych osiągnięć astronomii obserwacyjnej w U.S.A.*, „Urania” 1946, no. 5–6, p. 105–108; J. Mergentaler, *Udział polskich astronomów w Międzynarodowym Roku Geofizyki*, „Urania” 1957, no. 4, p. 97–100; A. Opolski, *Kongres Międzynarodowej Unii Astronomicznej w Zurichu w sierpniu 1948 r.*, „Urania” 1948, no. 7–9, p. 104–107; S. Grzędzielski, *Konferencja poświęcona widmom molekularnym*, „Urania” 1957, no. 4, p. 157–113 and others.

in 1949 — at that time she was research assistant at the Jagellonian University Astronomical Observatory.

In 1951–1952, academics and readers engaged in a discussion on the pages of the magazine on topic of the popularisation of science, and particularly astronomy⁴², one of the results of which was the idea of making independent work in laboratories possible for those who were interested. Professor Włodzimierz Zonn noted the “neglect of philosophical issues, which has had terrible results in terms of intellectual life as a whole”⁴³, and the loss of connections between the individual academic disciplines. He saw popularisation as an interdisciplinary “catalyst”, which would help scientists develop awareness of recent scientific achievements without directly entering into their area of specialisation, and as a propagator of a scientific way of thinking in the context of lifelong learning (after finishing education)⁴⁴. In their letters, readers drew attention to the lack of announcements about popular science publications in popular journals, and the poor distribution of popular science magazines in small towns. An increase in the role of radio in the popularisation of astronomy was requested⁴⁵.

The regular features in the magazine began with the *Chronicles*, similarly to the pre-war booklets, in which news of current astronomical discoveries, and of the use of new equipment and research programmes being carried out around the world was published. The *PTMA Chronicles* gave information about the activities of the Association and its individual branches. In the next section, *Observations*, reports on observations of the skies by PTMA members were printed. Articles presenting methods of constructing tools for observing the sky or sundials were also included. It is worth adding that in 1954, due to an inability to include the increasingly lengthy papers of PTMA members, the Astronomical Committee of the Polish Academy of Sciences (Polska Akademia Nauk) passed a motion for “Urania” to publish a 2–3 page additional scientific section dedicated to these papers in one of the international languages. Dr. Jan Gadomski was appointed to be the editor of this additional section⁴⁶. The first “Scientific Addition to Urania” appeared in 1956. The next three were published in 1959, 1961, 1963. After a break of a few years, a two-volume yearly additional section entitled (in English) “The Astronomical Reports” appeared (1974–1975), which was distributed in other countries. The first volume was edited by Prof. Konrad Rudnicki, and the second was edited jointly by Konrad Rudnicki and Piotr Flin.

In 1955, a new regular feature called *Meteors* was founded with the aim of creating tighter bonds with observatories⁴⁷, containing observations of meteors made by young people from astronomical clubs attached to schools or individual

⁴² *Od Redakcji*, „Urania” 1951, no. 1–2, p. 33–34.

⁴³ W. Zonn, *O popularyzacji nauki, w szczególności astronomii*, „Urania” 1951, no. 3–4, p. 34–39.

⁴⁴ *Ibidem*, p. 34–39.

⁴⁵ S. Gębała, *[Z listu do redakcji]*, „Urania” 1951, no. 7–8, p. 157.

⁴⁶ Redakcja, *Dodatek naukowy „Uranii”*, „Urania” 1955, no. 6, p. 176.

⁴⁷ A. Pacholczyk, *Meteory*, „Urania” 1955, no. 5, p. 150.

observatories which were not linked to the Association. From issue seven in 1956, these observations were included in the larger regular feature entitled “The Observers’ Handbook”, which contained articles presenting observations of meteors, variable stars and planetoids, as well as “instrumental work which is an introduction to scientific observation”⁴⁸. Readers would also find instructional material which encouraged them to build their own astronomical instruments. In the section entitled *Astronomy at School*, which usually took up three pages, ways of presenting astronomical problems in lessons at school were discussed. All astronomical phenomena which appeared in the sky were entered in the *Astronomical Calendar*.

In the post-war “Urania”, books were still reviewed in the *Reviews of Publications* section, which sometimes covered up to four pages. As Krzysztof Ziółkowski writes, the reviews were supposed to draw attention to valuable texts, and sometimes warn readers about poor ones⁴⁹. On the inside back cover, a list of publications sent by publishing houses was printed. Sometimes, a list of contents of a particular magazine was included, along with brief information about the individual articles.

From 1955, the feature *On our cover* started to appear, where notes or a short article about the observatory whose photograph appeared on the cover of each issue were published. The most interesting reader letters were included in the *From our correspondence* section.

In 1955–1956, some booklets at times contained the feature *This and that*, which allowed readers to find out interesting facts and curiosities related to astronomy. From issue four in 1956, *Mental Entertainment* was printed.

Apart from the editorial board, the authors of the articles also had an influence on the high level of popularisation of astronomy, and these included famous astronomers and professors: Franciszek Kępiński, Włodzimierz Zonn, Konrad Rudnicki, Jan Mergentaler and Dr. Janusz Pagaczewski, astronomer, seismologist, discoverer of Nicholas Copernicus’ observatories⁵⁰. Foreign scientists from friendly countries, mostly Czechoslovakia, would also write for the magazine, presenting the achievements of their Association and describing Czech and Slovak observatories.

In 1950, the new editorial board, in an attempt to manage their financial problems, started the “Urania” fund, and a list of donors with the amounts contributed and thanks appeared on the inside back cover. From 1951, money was also collected for the Building of the People’s Observatory in Krakow Fund, and a list of sponsors with the amount donated appeared on the same page as the information on contributions to the “Urania” fund. At the same time, donations were being gathered in Warsaw,

⁴⁸ *Do czytelników*, „Urania” 1956, no. 9, p. 250.

⁴⁹ K. Ziółkowski, *Siedemdziesięciolecie „Uranii”*, „Urania” 1992, no. 3, p. 86.

⁵⁰ Cz. Białczyński, *Janusz Pagaczewski (1906–1975) — astronom i seismolog, odkrywca obserwatoriów Mikołaja Kopernika* [Electronic document] [Available on the internet] <http://bialczyński.wordpress.com/2010/02/16/janusz-pagaczewski-1906-1975-astronom-i-seismolog/>.

where even in 1956, architectural plans for a Nicholas Copernicus Planetarium and People's Observatory were created⁵¹, but unfortunately there was not enough money, and the observatories were never created.

The frequency of publication of *Urania* changed twice just after the war. In 1946, the publication was bimonthly and in 1947, financial difficulties created a year-long break, which the editorial board informed disorientated readers about in the first issue of 1948, with an apology⁵². From 1948, the booklets appeared four times a year, and the length was from 40 to 50 pages. As before the war, the numeration was constant throughout one year. From 1951, the magazine was published bimonthly with funding from The Education and Cultural Department Office of the Ministers' Presidium Council. The length of each booklet was over 40 pages at this time. From 1952 to 1958, with the development of the Association and the steady increase in number of school clubs gathering candidate members and students who were under 18, the Main Board of the PTMA decided that journal would become a monthly, published on the 25th day of each month. The booklets were between 31 and 32 pages in length.

Some issues included supplements. In 1947, "Urania" subscribers in Krakow applied to the city council for the status of an Association and on the 15th January, the Association of Amateur Astronomers was founded, and this information was given in a special announcement at the beginning of the issue by the Provisional Executive Board of the PTMA⁵³. The PTMA statute appeared as a supplement to issue 1–3 in 1948. In 1956, an atlas of the northern sky, created by Andrzej Pacholczyk especially for "Urania" and adapted for the observation of meteors and calculation of their radiants, was added to issue 2. The editorial board intensified its popularisation activities and published a series of popular science books entitled *The Urania Library (Biblioteka Uranii)* from 1948.

The format of the journal was unchanged after the war and measured 20cm. The booklets were between 30 to 40 pages long. The layout of "Urania" was relatively simple, as was the case with all popular science magazines at that time. The prints on the cover were black and white for the first two years after the war, and from 1949, colour appeared in one issue, usually blue, brown and green. The articles were richly illustrated with photographs, drawings and graphs. From issue 6 in 1953, inserts with black and white photographs on carbon paper were added, which made the periodical more attractive. The journal was printed on grade V paper with the circulation varying from 200 issues in the forties to 7112 issues in 1956. From 1957, the circulation began to fall from 6853 issues to 4400 issues in 1958.

⁵¹ J. Gadoński, *Projekt Planetarium i Ludowego Obserwatorium im. M. Kopernika w Warszawie*, „Urania” 1957, no. 2, p. 52.

⁵² *Od redakcji*, „Urania” 1948, no. 1–3, p. 41.

⁵³ *Polskie Towarzystwo Miłośników Astronomii zostało wskrzeszone*, „Urania” 1948, no. 1–3, p. 3–4.

Between the end of the second war and 1958, 12 years of “*Urania*” were published in 106 booklets in Krakow. The contents pages of the individual booklets appeared in English and Russian from 1950, which made the journal more accessible for foreign readers. During those twelve years, the publication was edited by five editors-in-chief: Jan Gadowski, Stanisław Piotrowski, Kazimierz Rudnicki, Władysław Zonn and Adam Strzałkowski. In December 1958, Andrzej Wróblewski from the Warsaw branch of the PTMA took on the responsibilities of editor, and in this way, the editorial address moved to Warsaw. In subsequent issues, however, Krakow continued to be put on the title page, probably because the Main Board did not move headquarters, and remained in Krakow.

When comparing the post-war editions of “*Urania*” with the pre-war ones, a clear development in the magazine in terms of content and presentation is visible. The authors of post-war editions still acquainted Polish readers with the latest theories and research results, however the pre-war booklets only contained one or two introductory essays, whereas the post-war booklets had four to six. Along with the rapid development of astronomy and the growing activities of the PTMA, the length of the individual issues also grew, and these were finally published monthly in the 50s, with circulations of six to seven thousand issues. The magazine did not change its format or the order of contents from its beginnings to 1958: the popular science articles, observations of the sky carried out by PTMA members, records of the most interesting events in the world of astronomy, PTMA chronicles, and the *Astronomical Calendar* continued the concept started by the pre-war editors and inspired an interest in astronomy among young people and adults.

The editorial boards of *Urania* were always looking for new approaches to the popularisation of science. After the war, when astronomy became a subject at school, the section *Astronomy at School*, in which a methodological way of presenting astronomical issues in school lessons is discussed, was started immediately, which demonstrates the development of the methodological aspect of the magazine. Before World War II, it also played a reviewing role, since it could help librarians to choose books as well as motivating readers to deepen their knowledge, with the creation of a regular section of reviews. *Urania*’s activating role was about inspiring readers to undertake basic investigations. The post-war editorial boards supported the activities of clubs, and from its beginnings, the publication motivated readers to carry out their own observations, with the creation of regular sections called *Observations* and *Meteors*. Editorial committees in 1946–1958 did not limit themselves to simply publishing the magazine, but tried to gather a group of young amateur scientists around the publication, and encouraged them to gain knowledge actively. *Urania* supported the activities of school astronomical clubs. The development of further roles for the magazine is evidence of the development of popularisation methods and of the form of *Urania*, which popularised astronomy at a high level and so had an influence on several generations’ interest in astronomy.