**Selected Manuscripts from Istanbul University Rare Books Collection:**

**SCIENTIAE 2025 Catalogue
*Compiled by Gaye Danışan,* Solmaz Ceren Özdemir, Meltem Erat, Kutsi Aybars Çetinalp**

**NEKTY01913 –***Risāle-i Irtifāʿ (Ishāqiyya)*, Aḥmad b. Khayr al-Dīn al-Güzelḥiṣārī (Ishak Hocası, Shams al-Dīn Aḥmad), [n.p., n.d.], AH 1120 / AD 1708, in taʿlīq script, 17 lines per page, 74 fols., 192 × 114 mm, Ottoman Turkish, Astronomy.

**Electronic Access:** <https://nek.istanbul.edu.tr/ekos/TY/nekty01913.pdf>

**General Note:**

İshak Hocası Ahmed b. Khayr al-Dīn al-Güzelḥiṣārī (Shams al-Dīn Aḥmad), who lived in the late 17th and early 18th centuries, was an Ottoman scholar, calligrapher, and poet. He became known as “Ishak Hocası” (teacher of Ishak) because he was the private tutor of İshak Efendi, secretary of Grand Vizier Köprülüzade Fazıl Ahmed Pasha (d. 1676). He authored numerous works in the fields of astronomy, calligraphy, rhetoric, theology, Qur’anic exegesis, ḥadīth, logic, and literature. His writings include both prose and verse, in the form of treatises, translations, commentaries, and glosses. His most renowned work is *Aksa’l-ʾIreb fī Tarjamat Muqaddimat al-Adab*, an Arabic–Turkish dictionary translated from al-Zamakhsharī’s *Muqaddimat al-Adab*. In astronomy, his *Risāle-i Irtifāʿ (Ishāqiyya)* stands out, a Turkish treatise explaining the use of astronomical instruments. *“Risāle-i Irtifāʿ”* (lit. Treatise on Altitudes) in reference to their focus on altitude measurements, such as quadrant. Known also as *Ishāqiyya* after İshak Efendi, copies of the treatise are preserved not only in the Istanbul University Rare Books Library (no.NEKTY01913, and NEKTY01749), but also exist in multiple copies across different collections and under slightly varying titles such as *Risāle-i Rubʿ-i Dāʾire, Risāle-i Muqanṭarāt* and *Risāla fī ʿAmal bi’l-Rubʿ al-Muqanṭarāt.*

Although the titles differ slightly, these manuscripts represent the same treatise on astronomical instruments and procedures. Highlighting these variants is important for bibliographic clarity and for researchers comparing different copies or studying the transmission of text.

**NEKTY01749 –** *Risāle-i Irtifāʿ (Ishāqiyya)*, Aḥmad b. Khayr al-Dīn al-Güzelḥiṣārī (Ishak Hocası, Shams al-Dīn Aḥmad), AH 1132 / AD 1720, in taʿlīq script, 60 fols., 205 × 135 mm, Ottoman Turkish, Astronomy.

**Other Contributor:** Meḥmed b. Ḥasan (ed.)

**Electronic Access:** <https://nek.istanbul.edu.tr/ekos/TY/nekty01749.pdf>

**General Note:** Another manuscript copy of the same work is NEKTY01913 (AH 1120 / AD 1708, 74 fols.). In that copy, the diagram sometimes appears on an additional page, seemingly as a marginal insert. This initially raises the question of whether the diagram represents a contribution by the scribe. However, upon examining an earlier copy of the work, the same diagram is integrated within the main text. A comparison of the diagrams across these two copies indicates that they were not later marginal additions by the copyist, but were originally part of the work itself.

**NEKTY01613 –** *Ḫulāṣat al-Hay’a,* Seydi Ali Reis b. Hüseyin Galatalı Katibi, AH 970 / AD 1563, in naskh script, 17 lines per page, 82 fols., 237 × 138 mm, Ottoman Turkish, Astronomy.

**Electronic Access:** [https://nek.istanbul.edu.tr/ekos/TY/nekty01613.pdf](%20https%3A//nek.istanbul.edu.tr/ekos/TY/nekty01613.pdf)

**General Note:**

Ottoman navigator and scholar Seydi Ali Reis (d.1562) composed this work based on his translation of astronomer and mathematician Ali Kuşçu’s (d.1474) *ar-Risālat al-Fatḥiyya*, following the recommendation of Hamdullah b. Şeyh Cemâleddin Efendi, from whom he received instruction in astronomy and mathematics. His teacher advised that, alongside the existing Arabic and Persian works on these subjects, a work in Turkish should also be written, and specifically recommended Ali Kuşçu’s *al-Risālat al-Fatḥiyya* (1473), an expanded Arabic edition of *Risāla dar ʿIlm al-Hay’a*, which had been presented to Sultan Mehmed the Conqueror. Accordingly, Seydi Ali Reis undertook the translation of this text, which, after Kadızâde-i Rûmî’s work, became one of the most widely taught texts in Ottoman madrasas.

Seydi Ali Reis built upon the existing knowledge of astronomy and geography, referring to earlier works, and added his commentary and annotations. The work is therefore not a straightforward translation; it incorporates supplementary material from various sources, notably Kadızāde-i Rūmī’s *Sharḥ al-Mulakhkhaṣ fī al-Hayʾa* and Qutb al-Dīn al-Shīrāzī’s *Nihāyat al-Idrāk*. The completed text was presented to Sultan Suleiman the Magnificent. This work survives in multiple manuscript copies.

**NEKTY01804 –** *Mirʾat-ı Kaināt min Alātü’l-Irtifā*, Seydi Ali Reis b. Hüseyin Galatalı Katibi,  [n.p.: n.d.], AH 1082 / AD 1671-72, in naskh script, 20 lines per page, 117 fols., 225 × 123 mm, Ottoman Turkish, Astronomy.

**Other Contributor:** Nuh b. Hüseyin, ed.

**Electronic Access:**<https://nek.istanbul.edu.tr/ekos/TY/nekty01804.pdf>

**General Note:**

In the sixteenth century, Ottoman munejjims (astronomers/astrologers) and muwaqqits (timekeepers) extensively used the astrolabe, sine quadrant, and astrolabe quadrant, leading to numerous treatises describing their construction and use. Seydi Ali’s *Mirʾat-ı Kâinat* (d. 1082/1671–72) fits within this Ottoman tradition, providing detailed instructions for these instruments. The manuscript comprises an introduction, five chapters, and 120 sections, covering the astrolabe, astrolabe quadrant, sine quadrant, zatü’l-kürsi, and equatorial circle. While such treatises are rarely illustrated, the Istanbul Library copy is particularly noteworthy for a unique depiction of a celestial globe with two additional components not found in other copies: a plumb line representing the prime vertical (corresponding to Istanbul’s latitude, 41° N) and an hour circle with a pointer, graduated into 24 hours in abjad numerals. The hour circle allows time indication and astronomical calculations, likely reflecting European influence. This manuscript exemplifies the circulation of scientific knowledge in the seventeenth-century Ottoman world and demonstrates how individual copies could incorporate contemporary practices and external influences.

**NEKTY03232 –** *Mecmūʿat al-Rasāʾil fī’l-Hayʾa*, 216 v.; 310 × 150 mm, Ottoman Turkish and Arabic, Astronomy.

**Contributors:** Mustafa b. ʿAlī al-Muwaqqit, ʿUmar b. Muḥammad b. Ibrāhīm al-Wakīl

**Electronic Access:** <https://nek.istanbul.edu.tr/ekos/TY/nekty03232.pdf>

**General Note:**

This manuscript is a *mecmūʿa* (compendium) consisting of several treatises on different subjects related to astronomy, with a strong emphasis on astronomical instruments. The first treatise is authored by Mustafa b. ʿAlī al-Muwaqqit. It is followed by a treatise in Arabic by ʿUmar b. Muḥammad b. Ibrāhīm al-Wakīl, on *Rubʿ al-Mujayyab*, containing arithmetic and geometric rules as well as geometric proofs. The text then returns to Ottoman Turkish with a treatise on the *Ceyb-i Afākī* instrument, concluding on fol. 55r with a colophon dated 1185 Zilqade. The manuscript subsequently continues under the title *Ceyb-i Türki* on fol. 56v, presenting a 25-section (*bab*) treatise again attributed to Mustafa b. ʿAlī al-Muwaqqit. Some sections are in Arabic, reflecting the composite nature of the work. While catalogue information such as folio numbers is correct, it does not fully capture the chronological and multi-lingual character of the manuscript.

**NEKTY02668 –** *Teşrīhu’l-Eflāk* (translation), Baha’ al-Dīn Muḥammad b. Ḥusayn al-ʿĀmilī, AH 1247/ AD 1831, in taʿlīq script, 67 fols., 257 × 179 mm, Ottoman Turkish, Astronomy.

**Other Contributor:** Muḥammad Atīf Shām Qāḍī (translator).

**Electronic Access:**<https://nek.istanbul.edu.tr/ekos/TY/nekty02668.pdf>

**General Note:**

Bahā’ al-Dīn al-‘Āmīlī (953/1546–1622) was born in Ba‘labak, Lebanon, and pursued his studies in Iran, Jerusalem, and Anatolia. A versatile scholar, he worked not only in the religious sciences but also in philosophy, mathematics, and medicine; his works were studied for many years across Iran, Iraq, and the Ottoman territories.

In the field of mathematical sciences, he authored several works, including *Tašrīḥ al-Aflāk* (“On the Celestial Spheres”). He is known to have written a commentary on this work, which serves as a summary of the theoretical astronomy developed in the medieval Islamic world. This text, which has multiple commentaries, was published in Tehran in 1284 AH (1867–68 CE). In addition to its astronomical content, it also addresses topics in geometry and trigonometry.

On the other hand, the translator Mehmed Âtıf Efendi, known as Kuyucaklızāde (d. 1847), an Ottoman judge and scholar of mathematics and astronomy from a scholarly family in Kuyucak, was educated in the traditional Ottoman madrasa system and held kadı posts in İzmir, Şam, and ultimately Istanbul. He showed a particular interest in mathematical sciences and contributed to the reformist movements of Sultan Mahmud II’s era while remaining largely within the classical Islamic scholarly tradition. In 1831, as kadı of Şam, he translated and annotated Bahā’ al-Dīn Âmilī’s *Teşrîḥu’l-Eflāk*, a theoretical astronomy textbook used in Ottoman madrasas. The commentary is notable for not distinguishing between the Ptolemaic, Tychonic, and Copernican systems and for acknowledging that the heliocentric system had been known since antiquity. It presents astronomy as a technical rather than philosophical problem. Mehmed Âtıf’s approach reflects an effort to reconcile Western scientific ideas with classical Islamic sources, highlighting the continuity of knowledge from Greek and Islamic traditions.

**NEKTY01366 –** *Tercüme-i Sī Fasl der Maʿrifet-i Taḳvīm*, Nasir al-Din Muhammad b. Muhammad b. Hasan al-Tūsī; Ottoman Turkish; translated by Aḥmed ed-Dāʾī; edited by Muhammad Edib; AH 1093 / AD 1682; in naskh script, 23 lines per page; 18 vols., 132 × 209 mm; Astronomy.

**Electronic Access:**<https://nek.istanbul.edu.tr/ekos/TY/nekty01366.pdf>

**General Note:**

The work of Nasir al-Din al-Tusi, founder of the Maragha Observatory, known as *Risāla-i Sī Fasl* (“Treatise of Thirty Chapters”) or *al-Mukhtaṣar fī ʿIlm al-Tanjīm wa Maʿrifat al-Takwīm* (“A Concise Book on Astronomy and Calendar Knowledge”), is a foundational text in the field of astronomy. This work was translated into Ottoman Turkish by the poet and scholar Aḥmed-i Dāʾī under the title *Tercüme-i Sī Fasl fi’t-Taḳvīm*. A notable feature of this translation is the provision of Turkish equivalents for terms used in medieval astronomy, which were subsequently employed by Ottoman scholars for centuries. In his preface, Aḥmed-i Dāʾī explicitly states that his aim was to make the work accessible and useful for beginners. Accordingly, he rendered topics such as abjad numerals (letter-numerals), the Hijrī, Rūmī, Iranian, and Jalālī calendars, planets, zodiac signs, and various forms of timekeeping, as well as some astrological subjects, from Persian into clear and comprehensible Turkish. Several manuscript copies of this astronomy- and astrology-related work have survived.

**NEKTY02000 –** *983 Senesine Mahsus Zayīçeli Takvīm*, Ottoman Turkish, [n.p., n.d.], in naskh script, irregular lines per page, 38 fols., with miniatures, 370 × 243 mm, Astronomy.

**Electronic access:**<https://nek.istanbul.edu.tr/ekos/TY/nekty02000.pdf>

**General Notes:**

Calendars are among the most important sources in the Ottoman astronomical literature. Broadly speaking, three types of calendars can be identified: *takvīm-i sāl (annual calendars)*, *aḥkām-ı sāl (prognostications for the ascendant of a year)*, and perpetual calendars. The reason for the abundance and regularity of annual calendars in the literature lies in the Ottoman chief astronomer’s office. The position of müneccimbaşı (chief astronomer) was an official role, with one of its primary duties being the preparation of annual calendars. Consequently, the structure of annual calendars generally exhibits certain characteristic features, giving them a standardised appearance. However, variations can be observed depending on the knowledge and approach of the individual compiler. Some calendars were elaborately prepared as ornamental works. The *983 Senesine Mahsus Zayîçeli Takvīm* is one such example. Its preparation period corresponds to the tenure of Taqi ad-Din Muhammad ibn Ma'ruf as *müneccimbaşı* (chief astronomer), although the identity of its compiler remains unknown. This calendar contains extensive information related to health and timekeeping, and is also remarkably rich in iconography and diagrams. Among the annual calendars, it encompasses both *takvīm-i sāl* and *aḥkām-ı sāl* types.

**NEKTY01993 –** *Alāt-ı Rasādīye li-Zij-i Şehinşāhīye*, Taqi ad-Din Muhammad ibn Ma'ruf, [n.p.: n.d.], AH 1059 / AD. 1649-50, in naskh script, 21 lines per page, 14 fols., 203 × 248 mm, Ottoman Turkish, Astronomy.

**Electronic Access:**<https://nek.istanbul.edu.tr/ekos/TY/nekty01993.pdf>

**General Note:**

This work discusses the astronomical instruments used at the Istanbul Observatory, founded by Taqī al-Dīn, and includes precise illustrations of the instruments. It is believed that the manuscript was copied by one of the astronomers in Taqī al-Dīn’s entourage. The names of Sultan Murad III, Grand Vizier Sokollu Mehmed Pasha, and Ḥoca Saʿduddīn Efendi appear at the beginning of the manuscript, suggesting that it was composed between 1576 and 1580.

**NEKTY02766** – *Eşcārü’l-Es̱mār* (Translation), Ali Şah b. Kasım el-Hārezmī, [n.p.: n.d.], in naskh script, 15 lines per page, 260 fols., 184 × 123 mm, Ottoman Turkish, Astronomy.

**Other Contributor:** Abdülaziz Efendi Hekimbaş (Translator)

**Electronic Access:**<https://nek.istanbul.edu.tr/ekos/TY/nekty02766.pdf>

**General Note:**

This is the Ottoman Turkish translation, commissioned by Sultan Mustafa III, of *Eşcār u Es̱mār*, a Persian work on astrology by Alā’ al-Dīn Alişah b. Kāsım al-Hārezmī. The text also includes a section on music. As an encyclopedic work, the *Tercüme-i Eşcār u Es̱mār* is notable for highlighting continuities between historical astrological knowledge and contemporary understanding.

**NEKTY00208 –** *Da‘vetname-i Firdawsī*, Firdawsī-i Tāvīl, [n.p.: n.d.], AH 1114, in taʿlīq script, 23 lines per page, 90 fols., 157 × 247 mm, Ottoman Turkish, Magic; binding: black leather.

**Electronic Access:**<https://nek.istanbul.edu.tr/ekos/TY/nekty00208.pdf>

**General Note:**

This prose work on the occult sciences (*ʿulūm-ı garībe*) and astronomy was composed in 893/1487 in Balıkesir and presented as a gift to Sultan Bayezid. Firdawsī compiled it through translation and adaptation from sources such as *Şemsü’l-Maʿārifi’s-Saġīr*, *Muṣḥafü’l-Kevākib*, and *Daqāʾiqu’l-Ḥaqāʾiq*. The subjects addressed in the text fall under astrology, angels and jinn, magic, and invocation. It features a rich astrological terminology and contains 141 illustrations in the style of folk painting.

**NEKAY00498 –** *Şerḥu’l-Mülaḥkhaṣ fī’l-Hayʾa*, Kadızāde-i Rūmī (Mūsā b. Muḥammad b. Maḥmūd, d. after 844/1440), [n.p.: n.d.], 86 fols., Arabic, Manuscript; Astronomy – Religious aspects – Islam.

**Electronic Access:**<https://nek.istanbul.edu.tr/ekos/AY/nekay00498.pdf>

**General Note:**

This is a commentary on al-Ṣāğmīnī’s *al-Mulahhaṣ fī’l-Ḥayʾa*, completed in 814/1412 and presented to Ulugh Beg. It is the most important work authored by Kadızāde in the field of theoretical astronomy. The work was taught as an intermediate-level textbook in Ottoman madrasas, and more than 300 copies have survived to the present day. In addition, it has been published in several editions.

**NEKAY01353 –** *Şerḥu’l-Mülaḥkhaṣ fī’l-Hayʾa*, Kadızāde-i Rūmī (Mūsā b. Muḥammad b. Maḥmūd, d. after 844/1440), [n.p.: n.d.], 83 fols., Arabic, Manuscript; Astronomy – Religious aspects – Islam.

Notes: beginning of the copy is missing; text is separated from commentary by drawn lines; includes diagrams, marginal notes, and corrections.

**Electronic Access:**<https://nek.istanbul.edu.tr/ekos/AY/nekay01353.pdf>

**General Note:**

This is a commentary on al-Mulahhaṣ fī’l-Ḥayʾa by Ṣadr al-Dīn al-Qāshmīnī (d. ca. 619/1221), a concise work that was used as a textbook in astronomy courses at madrasas. Kadızade completed this commentary in 814/1412 and dedicated it to Ulugh Beg. Before Kadızade, commentaries on this work had been written by Faẓlullāh al-‘Ubaydī, Kemāl al-Dīn al-Türkmanī (d. ca. 756/1355), and Sayyid Sharīf al-Jurjānī (d. 816/1414). However, none of these earlier commentaries gained the fame of Kadızade’s. Owing to its popularity and practicality, various scholars also wrote marginal notes (ḥāshiyahs) on Kadızade’s commentary. According to Taşköprülüzāde, he read this commentary from Muḥammad al-Niksārī, who had studied it with Faẓlullāh al-Shīrvānī, and Faẓlullāh in turn from its author Kadızade.

As it was used extensively as a textbook in madrasas, Kadızade’s commentary is the most widely preserved work in this tradition, with nearly 150 copies recorded in manuscript catalogues. It was first published as a lithograph in Iran in 1290/1873, and later printed in Lucknow (1292, 1313, 1316), Delhi, and Istanbul (1296/1879) as a standard printed edition.

**NEKAY02895 –** *Risāle ʿalā Rubʿ al-Muqantarāt / Kitāb al-Marasīd / Risālat al-Jayyib wa’l-Muqantara / Risāle fī’l-ʿAmal bi’r-Rubʿ al-Mujayyab*, Gelenbevī (Ebu’l-Feth Muḥyiddin Ismāʿīl b. Muṣṭafā b. Maḥmūd al-Aydīnī, d. 1205/1791), [n.p.: n.d.], ff. 1v–45v, Arabic, Manuscript; Astronomy – Islam.

**General Notes:** Copy written during the author’s lifetime; marginal minhūwāt notes; headings in red ink; some diagrams in margins; ownership seals include “ʿAbduhu Sayyid Mehmed Shākir” and additional seals with symbolic inscriptions; colophon dated 1203/1789.

**Electronic Access:**<https://nek.istanbul.edu.tr/ekos/AY/nekay02895-01.pdf>

**NEKAY01467 –** *Risāle fī’l-ʿAmal bi-Rubʿ al-Mawṣūm bi’l-Muqantarāt*, Ibn al-Majdī (Abū’l-ʿAbbās Shihāb al-Dīn Aḥmad b. Rajab b. Ṭibūga/Tinbuga, d. 850/1447), [n.p.: n.d.], ff. 83v–87v, Arabic, Manuscript; Astronomy – Islam.

**Notes:** marginal short notes; copyist Mustafa b. Ḥājjī ʿAbdallāh. Colophon dated 1274/1857.

**Electronic Access:**<https://nek.istanbul.edu.tr/ekos/AY/nekay01467-05.pdf>

**NEKAY04301/1-8 –** *Makale fi inikasi'ş-şüa*, Nasirüddin et-Tusi, (Ebu Ca'fer Nasirüddin Muhammed b. Muhammed b. el-Hasen et-Tusi), (d. 672/1274), [n.p.: n.d.], ff. 33v–36v, Arabic, Manuscript; Astronomy – Islam.

**Electronic Access:**<https://nek.istanbul.edu.tr/ekos/AY/nekay04301-03.pdf>

**General Note:** This Arabic manuscript (NEKAY04301) is a composite volume comprising eight risālas on astronomy and optics by classical authors, including Theodosius of Bithynia, Autolycus of Pitane, Naṣīr al-Dīn al-Ṭūsī, Ibn al-Šāṭir, Kusta b. Luka al-Bālibekki, Ishāq b. Hunayn, Ibn Muhammad Ṣādiq Mirza al-Ghūlistānī, and Bahā’ al-Dīn al-ʿĀmili. The texts include diagrams illustrating celestial motion, light reflection and refraction, and the determination of the qibla. Some treatises were translated or revised from Greek or earlier Arabic sources, and several were corrected or copied by Muḥammad Ṣādiq Mīrzā Muḥammad al-Qasafī in 1118 AH/1706 CE.

* **NEKAY04301/01** – *Kitāb al-ʿUkr li Savzūsyūs*, Theodosius of Bithynia (d. ca. 100), [n.p.: , copied:  1706], ff. 1v–26v; Astronomy – Islam, Translation from Greek to Arabic.

**Other Contributors:** Translated (up to Book III, Chapter V) by Qusṭā ibn Lūqā al-Baʿlabakkī (d. 300/912); translation of the remainder and revision by Thābit ibn Qurra al-Ḥarrānī (d. 288/901); copied by Muḥammad Ṣādiq Mīrzā Muḥammad al-Qasafī.

**Electronic Access:**<https://nek.istanbul.edu.tr/ekos/AY/nekay04301-01.pdf>

**General Notes:**

Begins at fol. 1v with blank space followed by the name of Theodosius, suggesting that the missing portion likely contained his work. The book attributed to Theodosius consists of three treatises and fifty-nine chapters, though some manuscripts note missing chapter titles. The Arabic translation was commissioned by Abū al-ʿAbbās Aḥmad ibn al-Muʿtaṣim Billāh. Qusṭā ibn Lūqā al-Baʿlabakkī translated the text up to the fifth chapter of the third treatise, while Thābit ibn Qurra al-Ḥarrānī completed and revised the remainder.

The first treatise contains twenty-two chapters. It begins with the definition of the sphere and its rotational movement: “The sphere is a body enclosed by a single surface, within which there is a point equidistant from all straight lines drawn to the surface. This point is the center of the sphere, fixed on the axis about which it rotates. Its poles are the two ends of this axis. The pole of a circle on the sphere is the point on its surface equidistant from all straight lines drawn to the circumference of the circle.” (excerpt from the text). The treatise ends on fol. 26r with a colophon: “This treatise was completed on Saturday, 18 Ramaḍān 1118/December 29, 1706.”

* **NEKAY04301/02** – *Kitāb al-Kūrāt al-Mutaḥarrika li-Otolokus*, [n.p.: n.d.], ff. 28v–33r, Arabic, Manuscript; Astronomy – Islam, Translation from Greek.

**Other Contributors:** Translation revised by Thābit ibn Qurrah (d. 901); presented in the recension (taḥrīr) of Naṣīr al-Dīn al-Ṭūsī (d. 1274); corrected by Muḥammad Ṣādiq Mīrzā Muḥammad al-Qasafī in AH 111(8?)

**Electronic Access:**<https://nek.istanbul.edu.tr/ekos/AY/nekay04301-02.pdf>

**General Note:** Arabic version of *De sphaera quae movetur* (Περὶ κινουμένης σφαίρας; كتاب الكرة المتحركة) by the astronomer, mathematician, and geographer Autolycus of Pitane (Αὐτόλυκος ὁ Πιταναῖος; أوطولوقس). The text consists of one treatise in twelve chapters, explaining the motion of the sphere around a fixed axis and the properties of poles and parallel circles.

* **NEKAY04301/03 –** *Makāla fī Inqāṣi’sh-Shuʿā*, Naṣīr al-Dīn al-Ṭūsī (d. 672/1274), [n.p.: n.d.], ff. 33v–35r, Arabic, Manuscript; Optics.

**General Note:** Treatise on the rectilinear motion of light, and the problems of reflection and refraction of light on smooth and bright surfaces, including a section on the formation of images in concave mirrors. Although the text begins with Basmala on f. 35r -suggesting the start of a new section or risāla- it is treated as a continuous work in this manuscript. The text discusses how the proximity of an object to the mirror affects the image: close objects appear normally, at intermediate distance the image disappears, and farther objects appear inverted; the concave effect is achieved by hollowing the mirror into a spherical segment.

**Electronic Access:**<https://nek.istanbul.edu.tr/ekos/AY/nekay04301-03.pdf>

* **NEKAY04301/04** – *Kitāb al-Masākīn li Savzūsyūs*, Kusta b. Luka al-Bālibekki (d. 300/912–13), [n.p.: n.d.], ff. 37v–42r, Arabic, Manuscript; Optics;

**General Note:**

Translation of Thaudusius’ *Kitabu’l-Masākīn* by Kusta b. Luka al-Bālibekki, comprising twelve sections; discusses the shape of the Earth and the appearance of the heavens to observers, including which parts of the celestial sphere are visible from different latitudes.

**Electronic Access:**<https://nek.istanbul.edu.tr/ekos/AY/nekay04301-04.pdf>

* **NEKAY04301/05** – *Er-Rawzat al-Muzhirat fī’l-ʿAmal bi’r-Rubʿ al-Muqantarāt*, Ibn al-Šāṭir (Abū’l-Ḥasan Alā’ al-Dīn ʿAlī b. Ibrāhīm b. Muḥammad al-Šāṭir al-Dimashqī, d. 777/1375), [n.p.: n.d.], ff. 42v–51v, Arabic, Manuscript; Astronomy.

**Electronic Access:**<https://nek.istanbul.edu.tr/ekos/AY/nekay04301-05.pdf>

* **NEKAY04301/06** – *Risāle fī Marifati’s-Subḥi’l-Kāẓib* by Ibn Muhammad Ṣādiq Mirza Muhammad al-Mashhadi al-Ghūlistānī, [n.p.: n.d.], ff. 52r-53r, Arabic, Manuscript.

**General Note:**

On the phenomenon of false dawn before sunrise, light reflection, and related observations; completed 13 Dhū al-Ḥijjah 1118.

**Electronic Access:**<https://nek.istanbul.edu.tr/ekos/AY/nekay04301-06.pdf>

* **NEKAY04301/07** – *Kitāb Savzūsyūs fī’l-Layl wa’n-Nahār* by Ishāq b. Hunayn (Abū Yaʿqūb b. Hunayn b. Isḥāq al-Antākī al-Yūnānī, d. 298/910), [n.p.: n.d.], ff. 53r–60r, Arabic.

**General Note:**

Translation of Thaudusius’ Kitāb al-Layl wa’n-Nahār, describing the movement of the Sun and the variation of day and night, including summer and winter solstices. Colophon: completed Saturday, 14 Dhū al-Ḥijjah 1118 by Muḥammad Ṣādiq Mīrzā Muḥammad al-Qasafī.

**Electronic Access:**<https://nek.istanbul.edu.tr/ekos/AY/nekay04301-07.pdf>

* **NEKAY04301/07** – *Kitāb Savzūsyūs fī’l-Layl wa’n-Nahār (Thaudusius’ Book on Night and Day)* by Ishāq b. Hunayn (d. 298/910), [n.p.: n.d.], ff. 53r- 60r, Arabic, Manuscript.

**General Note:**

Translation of Thaudusius’ work on the motion of the Sun and the variation of day and night lengths, including summer and winter solstices.

**Electronic Access:**<https://nek.istanbul.edu.tr/ekos/AY/nekay04301-07.pdf>

* **NEKAY04301/08** – *Risāle fī Taḥqīqī Ǧiḥat al-Qibla*,  Bahā’ al-Dīn al-ʿĀmili (Bahā’ al-Dīn Muḥammad b. Ḥusayn b. ʿAbd al-Samad al-ʿĀmili al-Baḥrānī al-Hamadānī, d. 1031/1622), [n.p.: n.d.], ff. 60r–63v,Arabic, Manuscript.

**General Note:** On the determination of the qibla, written for general guidance. Colophon: completed Thursday, 19 Dhū al-Ḥijjah 1118.

**Electronic Access:**<https://nek.istanbul.edu.tr/ekos/AY/nekay04301-08.pdf>

* **NEKTY01975** – *Destan-ı Ferah ve Huma*, Mehmet Şerîf; Turkish, Ottoman, 449 v.: miniature by Nakkaş Hasan ; 296×190 mm; Naskh script, 17 lines per page; Subject: Turkish Literature – Divan Poetry.

**Electronic Access:**<https://nek.istanbul.edu.tr/ekos/TY/nekty01975.pdf>

**General Note:**

While most Ottoman literary works focus on unrequited love, *Dâsitân-ı Ferruh u Hümâ* is a rare example of a love story with a happy ending. The work was adapted from Kipchak into Anatolian Turkish (Işk-nâme, 1397) and later converted into prose for the palace, enhanced with illustrations. The adaptation was entrusted by Babüssaade Agha Gazanfer Agha to Mehmet Şerîf; the new manuscript was produced in the palace workshop, written by a master calligrapher, and illustrated by Nakkaş Hasan. Mehmet Şerîf updated the language and content to suit contemporary tastes. In the 19th century, two further manuscripts were created for public readings, enriched with new stories. The work was repeatedly produced across different times and regions between the 14th and 19th centuries, adapting to the tastes and conditions of each period, making it an important example of Ottoman literary culture.