

GROWTH RATE IN THE STUDY OF NORMAL AND CHEMICALLY PECULIAR  
STARS OF THE UPPER MAIN SEQUENCE

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ABSTRACT The research papers on normal and chemically peculiar stars of the upper main sequence are counted in the "Astronomy and Astrophysics Abstracts" for eight sample years in the period 1970-1990.

INTRODUCTION

We may not be aware of whether interest in certain objects (e.g., stars discussed in this colloquium) is increasing or decreasing either absolutely or relative to other objects. To answer such questions Abt (1988) counted the original research papers in various broad categories published in 1970, 1975, 1980, and 1985 as listed in the "Astronomy and Astrophysics Abstracts." I counted in a similar way the papers dealing with normal and chemically peculiar stars (NCPS) of the upper main sequence (UMS) for the same years as Abt (1988) did and for three additional years when the proceedings of the previous international meetings on the same class of the stars were published.

RESULTS

Table I lists the numbers of papers by year combined with an excerpt from Abt's (1988) Table I. Table II shows the contributions of three categories, i.e., planetary system, stars, and NCPS UMS, in all categories of astronomy and astrophysics. The last row of Table II lists the ratio of the number of NCPS UMS papers to that of stars.

The conclusions are:

1. The total number of papers grew from 7772 in 1970 to 14,302 in 1985, corresponding to a doubling time of 18.3 yr (Abt 1988).

TABLE I Numbers of Papers by Year

Category	1970	1975	1976	1980	1981	1985	1986	1990
Sum of all categories	7772	9760		10381		14302		
Planetary system	1896	2167		1749		1711		
Stars	1378	1666		1989		2657		
NCPS UMS	153	152	220 <sup>a</sup>	116	166 <sup>b</sup>	162	191 <sup>c</sup>	160

## Footnotes:

<sup>a</sup> With IAU Colloquium 32

<sup>b</sup> With the 1980 Liege Symposium

<sup>c</sup> With IAU Colloquium 90

TABLE II Contributions

	1970	1975	1980	1985
Planetary system	0.244	0.222	0.168	0.120
Stars	0.177	0.171	0.192	0.186
NCPS UMS	0.020	0.016	0.011	0.011
NCPS UMS/Stars	0.111	0.091	0.058	0.061

- In Abt's (1988) 11 categories, papers on the planetary system showed the largest fractional contribution in 1970 and 1975, but in 1980 and 1985 the peak shifted to stars (Abt 1988).
- The number of papers on the NCPS UMS has shown no significant change with time. Consequently the fractional contributions of NCPS UMS to astronomy and astrophysics as well as to stars decreased with time.

REFERENCE

Abt, H.A. 1988, PASP, 100, 1567