

$$\begin{aligned}
& \frac{p}{\Omega} \\
& \frac{R^N}{\partial \Omega} \\
& \{-\Delta_{p(x)}u = \\
& \lambda_1 a(x)f(v)+ \\
& \mu_1 \alpha(x)h(u), x \in \\
& \Omega, \\
& - \\
& \Delta_{q(x)}v = \\
& \lambda_2 b(x)g(u)+ \\
& \mu_2 \beta(x)\gamma(v), x \in \\
& \Omega, \\
& \overline{u} = \\
& 0 = \\
& v, x \in \\
& \partial \Omega, \\
& p(x) \in \\
& C^1(R^N) \\
& \sup|\nabla p(x)| < \\
& \frac{\infty}{1} < \\
& \inf p(x) \leq \\
& \sup p(x) < \\
& \frac{\infty}{0} = \\
& B(0,R) \subset \\
& R^N \\
& a,b,\alpha,\beta : \\
& [0,+\infty) \rightarrow \\
& (0,\infty)
\end{aligned}$$